CITY OF BLOOMINGTON

PLAN COMMISSION

January 9, 2017 @ 5:30 p.m.
COUNCIL CHAMBERS #115
CITY HALL

CITY OF BLOOMINGTON
PLAN COMMISSION
January 9, 2017 @ 5:30 p.m. ❖ **City Council Chambers - Room #115**

ROLL CALL

MINUTES TO BE APPROVED: December 5, 2016 and December 13, 2016

REPORTS, RESOLUTIONS AND COMMUNICATIONS:

1. Election of Officers:
   - Current President: VACANT
   - Current Vice President: Darryl Neher
2. Appointment of a Plan Commission Representative to the Board of Zoning Appeals:
   - Current Representative: VACANT
   - Current Alternate: VACANT
3. Appointment of a Plat Committee:
   - Current Representatives:
     - Rick Alexander: Planning and Transportation
     - Andrew Cibor: Plan Commission
     - Mike Carter: City Utilities
   - Alternate Representatives:
     - VACANT - Proposed: Roy Aten- Planning and Transportation
     - Brad Wisler- Plan Commission
     - Phil Peden- City Utilities
4. Appointment of a Hearing Officer
   - Current: VACANT
   - Proposed: Beth Rosenbarger
   - Current Alternate: Scott Robinson

PETITION CONTINUED TO FEBRUARY 13, 2017

PUD-30-16 **Regency Consolidated Residential LLC**
2182 W. Tapp Rd.
PUD amendment to allow multifamily residences on Parcel I of the Woolery PUD.
Case Manager: Eric Greulich

SP/UV-41-16 **Naples LLC (Doug Duncan)**
1610 N Kinser Pike and W. Gourley Pike
Site plan approval for a 3-story 39 unit multifamily building. Also requested is a use variance to allow first floor residential use.
Case Manager: Amelia Lewis

ITEMS FOR THE CONSENT AGENDA:

ZO-40-16 **GMS-Pavilion Properties**
4023 W 3rd St
Rezone 1.98 acres from Planned Unit Development (PUD) to Commercial General (CG).
Case Manager: Eric Greulich

PETITIONS:

PUD-31-16 **Patterson Point, LLC**
323 and 455 S. Westplex Ave.
PUD final plan approval for four mixed use buildings and one multi-family building.
Case Manager: James Roach

SP-39-16 **Sheree Demming**
424 E 6th ST
Site plan approval for a 3-story 2 unit multi-family building in the Commercial Downtown (CD) zoning district.
Case Manager: Jackie Scanlan

BLOOMINGTON PLAN COMMISSION **CASE #: PUD-31-16**
STAFF REPORT **DATE: January 9, 2017**
LOCATION: 323 and 455 S. Westplex Ave.

PETITIONER: Patterson Pointe, LLC
5005 N. SR 37, Bloomington

COUNSEL: Bynum Fanyo and Associates, Inc.
528 N. Walnut Street, Bloomington

REQUEST: The petitioner is requesting PUD Final Plan approval for four mixed use buildings and one multi-family building, including 33,000 square feet of non-residential space and 188 apartments.

BACKGROUND:

Area:	7.54 acres
Current Zoning:	PUD
GPP Designation:	Community Activity Center and Adams Street/Patterson Drive Subarea
Existing Land Use:	Vacant
Proposed Land Use:	Mixed use, Multi-family
Surrounding Uses:	North – Commercial (Westplex PUD) West – Patterson Pointe Senior Residence – multi-family East – Commercial, School South – The Dillon Multi-family

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REPORT: The Patterson Pointe PUD was created in 2010 (PUD-29-09). The PUD is approximately 18.32 acres in its entirety and bounded by W. 3rd Street to the north, S. Adams Street to the east, and the Landmark PUD to the south and west. The property had been used for many decades as the location of the Rogers Group and later Rogers Building Supply. The primary use of the property was a concrete product manufacturing operation but the property had been vacant for 4 years prior to creation of the PUD. Since creation of the PUD, several parts have received PUD Final Plan approval and have been developed, including The Dillon apartments, Patterson Pointe Senior Residence and the Academy of Science and Entrepreneurship.

In 2010, the Plan Commission and City Council approved a PUD District Ordinance and Preliminary Plan to redevelop this property. The PUD can be broken down into three main areas. Area C contains the Academy of Science and Entrepreneurship and has been fully built out. The northern 4.93 acres, Area A, includes the entire frontage along 3rd St. and has not yet been developed. The southern 11.36 acres, Area B, has been partially developed with multi-family housing.

This petition includes plans to develop all but the western part of Area A, A1, and the last remaining lot in Area B, Lot 2.

Area A is proposed to include four 4-story mixed use buildings. One building along Patterson Dr. will be 4-stories with the first floor non-residential space partially raised above sidewalk grade because of grade change along the street. Two buildings along 3rd St. will be 3-stories along the street and 4-stories fronting the parking lot in the rear. The lower level of these buildings include structured parking. This plan includes a building known as Building #5 behind the other buildings. This building was not conceptually shown on the PUD Preliminary Plan. The petitioners would like the Plan Commission to consider approving this building as a minor deviation from the Preliminary Plan. The proposed buildings in Area A include a mix of 1, 2, 3 and 4 bedroom apartments with a total of 72 apartments, 205 bedrooms, 71.5 DUEs, approximately 33,000 square feet of non-residential space plus 5,400 square feet of site serving office space, and 169 parking spaces for the residential and commercial uses. Parking is a combination of a parking lot, structured parking under the buildings and a parking boulvard along 3rd. Multi-family unit and bedroom breakdown for all of Area A is as follows:

- Four 1-bedroom units
- Twenty five 2-bedroom units
- Twenty one 3-bedroom units
- Twenty two 4-bedroom units

Lot 2 of Area B includes one multi-family building. This building is mostly designed to appear as townhouses per the requirements of the PUD. While the PUD Preliminary Plan envisioned 6 buildings and surface parking in an interior courtyard, the petitioners now propose a single building with a structured parking garage. This building includes a mix of studio, 1, 2, 3, and 4 bedroom units, 106 units, 272 bedrooms, 94.22 DUES, and 310 parking spaces in the garage. While the 310 parking spaces exceed the maximum of 0.9 parking spaces per bedroom outlined in the PUD, these spaces will be used by the tenants of both Area A and Lot 2 of Area B. Multi-family unit and bedroom breakdown for this lot is as follows:

- Six studio units
- Twenty eight 1-bedroom units
- Seventeen 2-bedroom units
- Sixteen 3-bedroom units
- Thirty nine 4-bedroom units

The PUD prohibited 5 bedroom apartments. This Final Plan also includes the extension of Westplex Ave. from south of the creek to connect with 3rd Street and the construction of Dolimah Ave. from Isaac Dr. to Milieu Dr. between Lot 2 and the Academy. It also includes the final restoration plans for the creek that was daylighted as part of an earlier phase of development.

Since December Meeting: The following changes have been made since the December meeting.

- The petitioner has completed the traffic study requested by staff. This is included in the packet. Key recommendations from the study include the need for a median in W. 3rd Street restricting left turns into the parking boulvard and confirmation that a traffic signal is not warranted at 3rd and Westplex.
- The petitioner has provided more rendered images of all buildings to give the Plan Commission a better visual representation of the buildings.
- The existing sidewalks along 3rd and Patterson will now be maintained or replaced instead of being removed to allow for more options for pedestrians.
- At the request of several Plan Commission members, the sidewalk/plaza width in front of Buildings 2, 3 and 4 has been reduced to 15 feet to pull the building 5 feet closer to the street while still providing room for street trees, pedestrian flow and outdoor display and seating. Some "bump-ins" in the building provide for more than 15 feet to facilitate outdoor seating.
- Building 2, which fronts on Patterson Drive, has been redesigned to change first floor grade to match the grade of the street. What was once a single floor elevation is now four elevations. This removes the need for an elevated walkway next to the sidewalk and brings all the commercial space to sidewalk grade. The height of the building was not increased to accomplish this.

At the December Plan Commission meeting there was considerable discussion about whether the parking boulevard design should be abandoned and require the petitioners to implement the street parking alternative. This issue was presented to both the Traffic Commission and the Bicycle and Pedestrian Safety Commission.

The Traffic Commission was concerned that this was not the right location for street parking due to high speeds, high volumes and other factors. They suggested that a more comprehensive change to the street may be warranted to reduce speeds and change existing context.

Opinion of the Bicycle and Pedestrian Safety Commission was split. Some members believed street parking would negatively impact the bike lane on 3rd street, which did not exist at the time the PUD was created. Others thought back-in angled parking on the street would be a better solution to provide parking in the safest and most urban friendly way.

PUD REVIEW ISSUES:

Heights/Densities/Lot Coverage: The Final Plan meets all density, impervious surface coverage and height requirements as outlined in the PUD District ordinance.

Architecture: Materials include brick, cementitious siding and panels, limestone, split-faced and ground-faced block, and EIFS only used as detailing. Cementitious materials

are only permitted as secondary materials on Area A on facades facing 3rd or Patterson. A materials breakdown has been provided on the elevations.

Area B was laid out to include buildings with a townhouse design. The buildings were not required to be townhouses, but to have the appearance of townhouses. The other Buildings on Area B developed as The Dillon and Patterson Pointe Senior Housing are all stacked flats with the appearance of townhouses. The proposed building in Area B is 4 stories in height and includes a vertical orientation of modules and first floor entries to have the appearance of townhouses. However, due to more than 18 feet of grade change on Lot 2, the southwest corner of the building is only 3-stories. Since the first meeting, most retaining walls were removed from around this building. Some units are now completely below grade and include window wells. Some second floor units now have direct access to the street through elevated stoops. There are still areas where the access is slightly below street grade, but this has been minimized since the first version.

Parking Boulevard: This PUD contained an unusual and innovative parking scenario between the building and the street. The petitioners referred to this plan as a "parking boulevard" because the parking was separated from 3rd and Patterson by a narrow landscaped strip. The purpose of the parking boulevard was to provide convenient parking in front of the buildings to serve the non-commercial space that feels like street parking, without creating the same conflicts for traffic on adjacent streets as street parking. The parking boulevard included angled parking spaces and a one way access aisle with an entry on 3rd and an exit on Patterson.

In 2010, the petitioner presented three different parking alternatives to the City Council. The first alternative was similar to the plan presented with this petition. The second alternative changed the orientation of the parking, pushing the parking spaces closer to the street and moving the access aisle closer to the buildings. This plan also provided for a "straight" connection between parts of Area A west of Westplex Ave. and the remainder to the east of Westplex Ave. with a single access point onto 3rd west of Westplex Ave. The third alternative was a more traditional street parking plan that included back-out on-street parking on Patterson and 3rd. The City Council did not specifically approve any of these plans, but instead provided for them to be "alternatives" that should be further evaluated by the Plan Commission at the time of the PUD Final Plan for Area A.

Few changes have been made on the design of the parking boulevard since the November meeting. The petitioner's plan is most closely similar to the parking boulevard shown to the Plan Commission in 2010. With this, they have a single entry on 3rd street and an exit onto Patterson. The parking spaces are closer to the building and sidewalk. The parking boulevard does not extend across Westplex Ave as there are no current plans to develop Area A1 to the west of Westplex.

Transportation Issues: The petitioner has submitted a traffic and safety study which is included in the packet. Key points from the traffic study:

- Development is anticipated to generate 170 AM peak hour total trips and 401 PM peak hour total trips

- No significant concerns regarding anticipated traffic operation with the development
- Recommend a full access at 3rd/Westplex with one inbound lane and two outbound lanes. A traffic signal not warranted at the 3rd/Westplex intersection
- Westbound left-turn movement at 3rd/Westplex should have 75' of storage for estimated 54' queue
- Parking Boulvard has fewer conflicts than on-street parking alternative
- Recommend a raised center median along 3rd Street to prohibit westbound left-turns from entering the parking boulevard area

All of the recommendations of the study have been incorporated in to the PUD Final Plan. Based on the recommendations of this study and the recommendations the Traffic Commission and Bicycle and Pedestrian Safety Commission, staff recommends approval of the petitioner's design for the parking Boulvard Staff believe this is in keeping with the alternatives approved by the City Council and will be the safest option for parking in this scenario.

Building #5: Proposed Building #5 is located behind the building that fronts on 3rd and Patterson. This building meets height and density requirements and includes 5,400 square feet of first floor site serving office space, but is shown in an area where no building was initially proposed. The Plan Commission did not indicate opposition to the location of this building in November or December.

Creek Restoration: This Final Plan includes the reconstruction of what was once a piped creek. On this site, 640 feet of the creek was opened up to the sky, or "daylighted." The reconstructed creek will provide greenspace, water quality treatment and an amenity to the development. With PUD-14-11, a riparian corridor reconstruction plan which included a facilities maintenance plan was approved. PUD-14-12 later deferred the full restoration of the creek until development of Area A, which is coming with this PUD Final Plan.

The proposed creek restoration was dramatically changed since after the November meeting. The current plan is in keeping with the design approved in 2011 in terms of plants, maintenance, tree preservation, water quality features, and culvert design. The Environmental Commission report does not note any needed changes to the design.

Streets and Sidewalks: This Final Plan includes the design of Westplex Ave. north from Isaac to 3rd and Dolimah Ave. from Isaac Dr. to Milieu Dr. between Lot 2 and the Academy. Dolimah includes on-street parking, street trees and bump-outs at intersections.

After hearing comments from the Plan Commission and the Bicycle and Pedestrian Safety Commission, the petitioner has included a combined curb and sidewalk along both 3rd and Patterson. This is the current sidewalk design and will accommodate pedestrians traveling along these street that do not intend to visit the proposed buildings.

Also based on comments given by the Plan Commission, the petitioner has reduced the width of the sidewalk and plaza in front of Buildings #2, 3, and 4 from 20 feet to 15 feet.

While 20 feet was specifically called out for in the original PUD, several Plan Commissioners commented that reducing this space would pull the building slightly closer to the street while still providing adequate width for street trees, through traffic and outdoor uses.

In compliance with the PUD Preliminary Plan, the petitioners have provided a pedestrian bridge across the creek from the front door of Building #5 on Lot 2 of Area B to the parking lot behind Area A. The preliminary plan initially showed a through pedestrian route from this bridge to the far southern side of the PUD, but this was not enacted with the development of the remainder of Area B. Staff believes the street network can accommodate pedestrian needs from the south to north sides of the development, so a through connection is not necessary.

The PUD initially envisioned relocating the bus stop on 3rd further to the west. Bloomington Transit prefers that the stop stay closer to its existing location near the intersection. This also allows for a single controlled pedestrian crossing point of the parking boulevard at the corner. The plaza between Buildings #2 and 3 has been designed to provide an accessible route from the parking lot behind these buildings to the parking boulevard for both shoppers to access the retail space and residents to access the bus stop. There is a staircase proposed between Buildings #3 and 4 to accommodate additional pedestrians.

Traffic Signal: The PUD included a commitment to install a traffic signal at the intersection of "Old" 3rd St. and Patterson Dr. With approval of the Patterson Park PUD to the southwest, the Council and the Plan Commission required a traffic signal at the intersection of Adams St. and Patterson Dr. At the time of that PUD approval, it was determined by the Plan Commission, staff and the Common Council, that that signal would take the place of the traffic signal originally required with this PUD. This Final Plan does not include a traffic signal.

Signage: Signage designs have not been submitted with this Final Plan. Signage approved for the PUD matches closely the UDO standards, but deviates in a couple of places. In particular, the PUD allows the multi-family use in Area B to be included on a multi-tenant center sign within Area A. Future signage must meet the PUD District Ordinance and the UDO.

Utilities: A utility plan has been submitted to CBU and is under review. No red flags have been identified.

Stormwater: A stormwater plan has been submitted to CBU and is under review. Final approval of the stormwater plan is required prior to release of any permits. No red flags have been identified.

ENVIRONMENTAL COMMISSION RECOMMENDATIONS: The Bloomington Environmental Commission (EC) has made 3 recommendations concerning this development.

1.) The Petitioner should continue to make necessary changes to the Landscape Plan.

Staff Response: See condition of approval #1.

2.) The Petitioner should apply green building practices to create high performance, low-carbon footprint structures, and provide the infrastructure/space for recyclable-material collection.

Staff Response: While highly desirable, this is not a requirement of the PUD or the UDO. The PUD did commit to recycling. Location of recycling collection areas are shown on the plans.

3.) The Petitioner should commit to salvaging, recycling, and reusing all possible construction materials not needed for construction.

Staff Response: While highly desirable, this is not a requirement of the PUD or the UDO. The PUD did commit to recycling.

Conclusions: Staff finds that the PUD is in keeping with the general and specific requirements of the PUD. The proposed changes to the preliminary plan (inclusion of Building #5, reduction of sidewalk from 20 feet to 15 feet, removal of pedestrian way through Lot 2 of Area B, some parking for Area A provide don Lot 2 of Area B) are minor deviations. The final plan meets height, density, parking, use and creek restoration requirements. The parking boulvard design is consistent with the alternatives considered by the Plan Commission and City Council and will provide a safe option for street grade parking with the inclusion of the partial median on 3rd Street. While the design of the buildings does not match the primary schematic elevations presented in 2009/2010, they are not dissimilar to the illustrative photos presented at that time and meet the specific architectural requirements of the PUD District Ordinance.

RECOMMENDATION: Staff recommends approval of PUD-31-16 with the following conditions:

1. Prior to issuance of a grading permit, the petitioner shall continue to work with staff on any unresolved issues concerning landscaping and right-of-way changes.
2. Utility plan must be designed so as to not conflict with the planting of street trees.
3. Prior to issuance of a grading permit, the petitioner must receive approval of a Right-of-way Encroachment from the Board of Public Works for the parking boulvard access lane.
4. Prior to final occupancy of any building, a final plat must be approved and recorded which dedicates all necessary right-of-way for Westplex Ave.
5. Creek maintenance plan must be recorded with plat. Plat must specify which parties or property owners have maintenance responsibility for creek.
6. A lighting plan must be submitted with the grading permit showing compliance with UDO lighting requirements.

MEMORANDUM

Date: November 28, 2016

To: Bloomington Plan Commission

From: Bloomington Environmental Commission

Through: Linda Thompson, Senior Environmental Planner

Subject: PUD-31-16, Patterson Pointe, Lots 1 & 2, Second hearing
323, 455 S. Westplex Avenue

The purpose of this memo is to convey the environmental concerns and recommendations of the Environmental Commission (EC) with the hope that action will be taken to enhance the environmental integrity of this proposed plan. The EC is aware there are practically no environmental features left on this heavily developed site; therefore the EC recommends that the site design include as many new environmentally beneficial features as possible.

The EC appreciates that the Petitioner addressed the list of questions we provided in the last memorandum (attached), and revised the Site Plan to include valuable improvements. Environmentally, the plan now looks much like was envisioned in the original PUD. The restored stream will indeed be an excellent example of creek restoration for both water quality and habitat restoration.

ISSUES OF SOUND ENVIRONMENTAL DESIGN

1.) LANDSCAPING

The Landscape Plan needs some revisions. The EC recommends that the Petitioner and staff continue working to make these corrections.

2.) GREEN BUILDING

The EC recommends that the developer design the building with as many best practices for energy savings and resource conservation as possible. Some examples of best practices that go beyond the Building Code include enhanced insulation; high efficiency heating and cooling; Energy Star doors, windows, lighting, and appliances; high efficiency toilets; programmable thermostats in each unit; sustainable floor coverings; and recycled products such as carpet and counter tops. Some specific recommendations to mitigate the effects of climate change and dwindling resources include the following.

Reduce Heat Island Effect The roof material should have a minimum initial Solar Reflective Index (SRI) of 0.65, and an aged index of 0.55. (*SRI* is a value that incorporates both solar reflectance and emittance in a single value to represent a material's temperature in the sun. SRI quantifies how hot a surface would get relative to standard black and standard white surfaces. It is calculated using equations based on previously measured values of solar reflectance and

emittance as laid out in the American Society for Testing and Materials Standard E 1980. It is expressed as a fraction (0.0 to 1.0) or percentage (0% to 100%)). If a roof membrane is used, it should be overlaid with a reflective coating or covered with a white, granulated cap sheet.

Energy efficiency Enhance the weather, air, and thermal barriers of the building envelope to reduce the energy consumption associated with conditioning indoor air, to reduce greenhouse gas emissions in our region.

Charging stations for electric vehicles
Many people are now purchasing electric vehicles (EV), making installation of charging stations a necessity for residents. Therefore the EC recommends that electric charging stations be installed for some of the parking spaces.

Space for staging recyclable materials prior to pickups
The EC recommends that space be allocated for recyclable-materials collection, which will reduce the facilities' carbon footprint and promote healthy indoor and outdoor environments. Recycling has become an important norm that has many benefits in energy and resource conservation. Recycling is thus an important contributor to Bloomington's environmental quality and sustainability and is expected in a 21st-century structure.

Green building and environmental stewardship are of utmost importance to the people of Bloomington and sustainable features are consistent with the spirit of the Unified Development Ordinance (UDO). Additionally, they are supported by Bloomington's overall commitment to sustainability and its green building initiative (http://Bloomington.in.gov/greenbuild). Sustainable building practices are explicitly called for by the Mayors' Climate Protection Agreement signed by former Mayor Kruzan; by City Council Resolution 06-05 supporting the Kyoto Protocol and reduction of our community's greenhouse gas emissions; by City Council Resolution 06-07, which recognizes and calls for planning for peak oil; and by a report from the Bloomington Peak Oil Task Force, *Redefining Prosperity: Energy Descent and Community Resilience Report*.

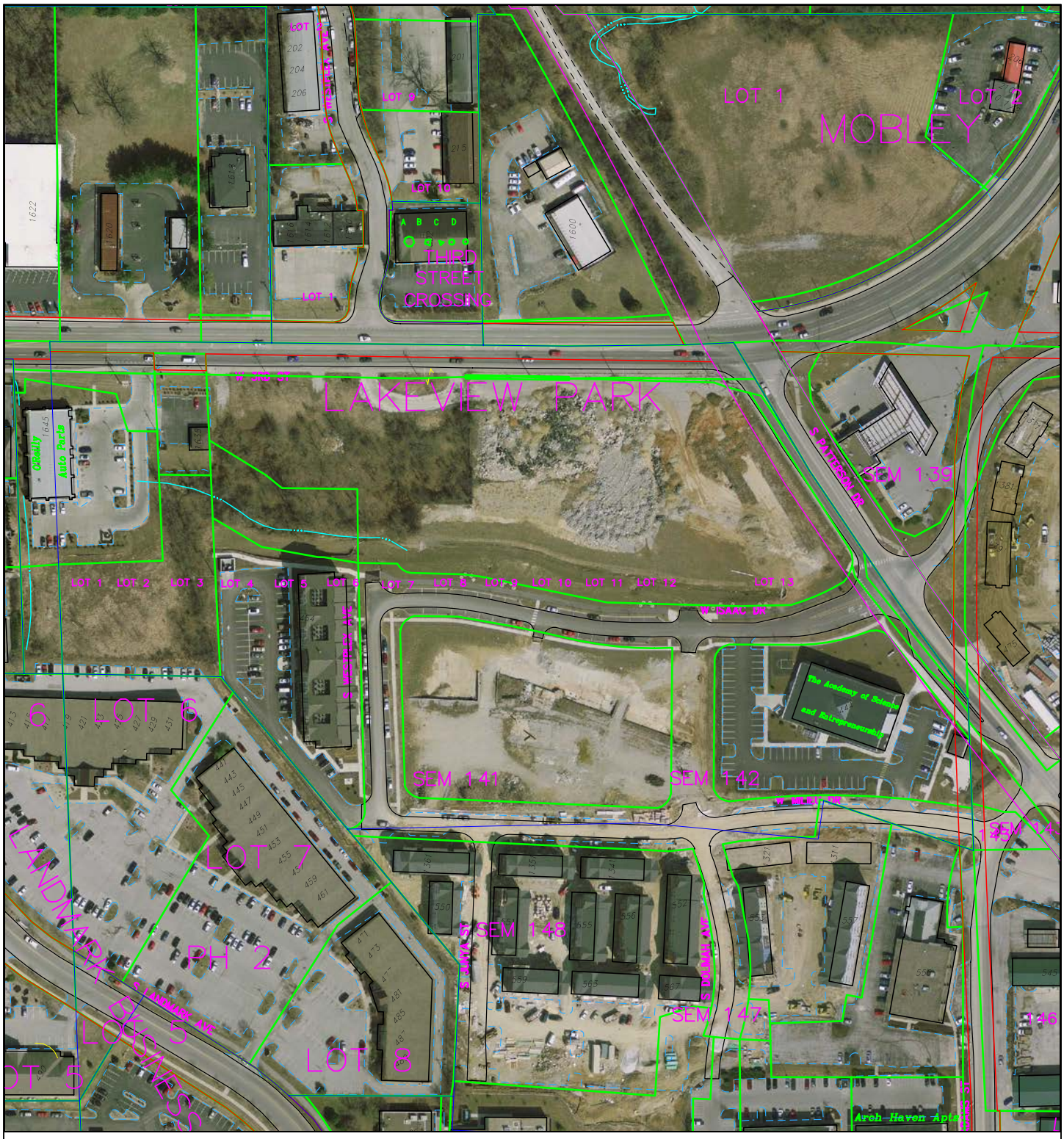
3.) CONSTRUCTION AND DEMOLITION DEBRIS
The EC recommends that construction and demolition debris from the construction of the new buildings be collected for reuse or recycling. This material could be sold to local salvage businesses, given to a resale store for future re-use, or recycled. Very little material should have to be disposed in a landfill.

EC RECOMENDATIONS

1.) The Petitioner should continue to make necessary changes to the Landscape Plan.

2.) The Petitioner should apply green building practices to create high performance, low-carbon footprint structures, and provide the infrastructure/space for recyclable-material collection.

3.) The Petitioner should commit to salvaging, recycling, and reusing all possible construction materials not needed for construction.



City of Bloomington
Planning & Transportation

By: roachja
26 Aug 16

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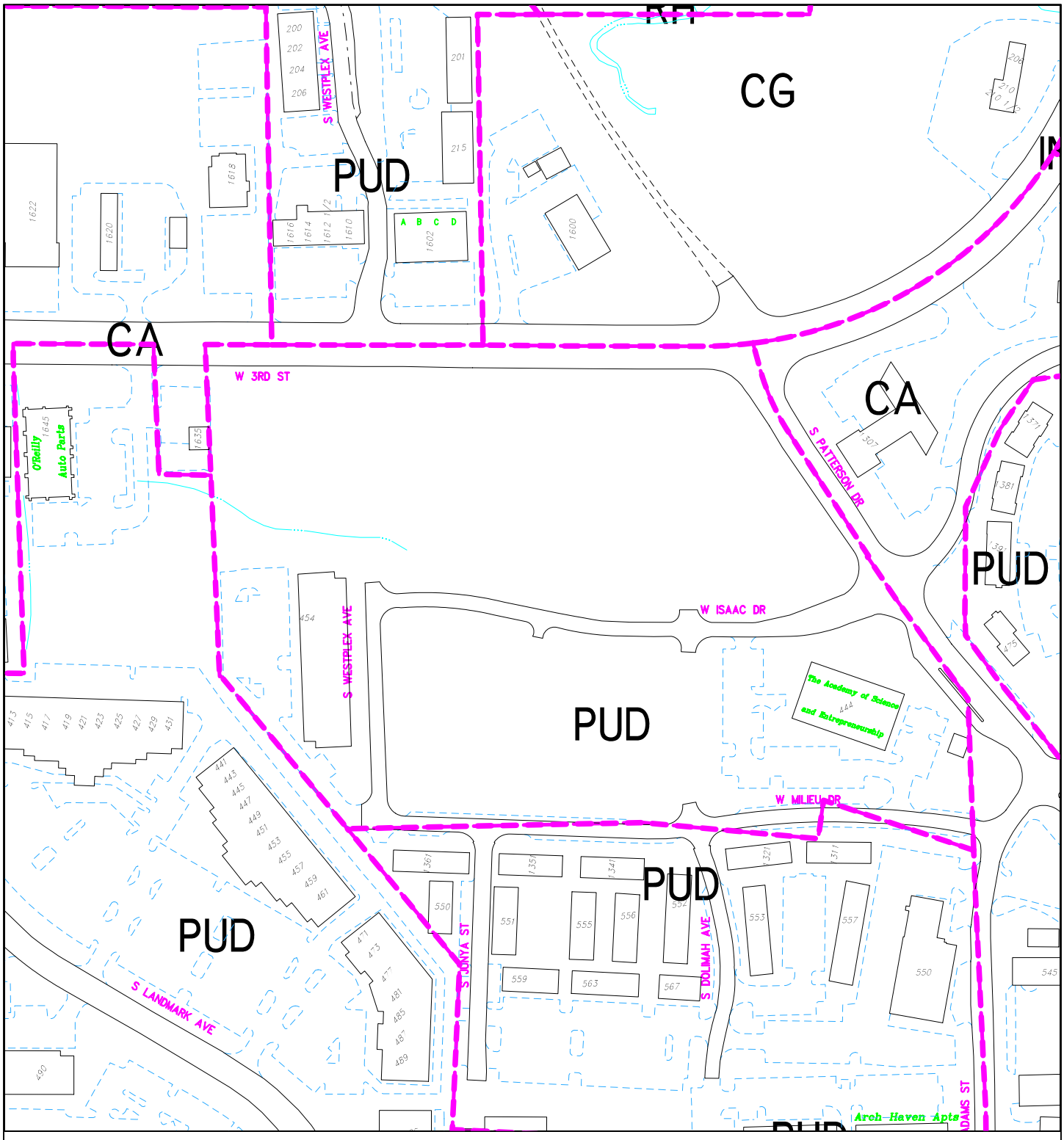
Scale: 1" = 200'

For reference only; map information NOT warranted.



City of Bloomington
Planning & Transportation

By: roachja
26 Aug 16

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Scale: 1" = 200'

For reference only; map information NOT warranted.

October 24, 2016 (Revised November 28, 2016)

City of Bloomington Plan Commission

401 N. Morton Street

Bloomington, Indiana 47403

Re: Patterson Pointe Final Plan Approval

Dear Plan Commission Members:

Our client Patterson Pointe, LLC respectfully request Final Plan approval of their PUD located at the southwest corner of West Third Street and Patterson Drive. The parcels include lots 1 and 2 of the Patterson Pointe Final Plat and are designated as use areas A2 and B respectively.

Use area A2 (lot 1) will have 4 mixed use buildings with ground floor commercial space and multi-family residential uses on floors 2, 3 and 4. Buildings 3 and 4 will also have 57 below grade parking spaces. There are an additional 130 street and surface parking spaces within lot 1.

Building 2 will have 11,177 square feet of commercial space and 27 apartments, building 3 will have 10,776 square feet of commercial space and 20 apartments, building 4 will have 11,122 square feet of commercial space and 18 apartments and building 5 will have 5,237 square feet of commercial space and 7 apartments. The total DUE value of lot 1 is 71.5.

Use area B (lot 2) with building 1 will consist of four floors of apartments and three floors of structured parking providing 310 parking spaces. There will be an additional 55 street and surface parking spaces. There is a total of 106 apartments with a DUE value of 94.22.

Access to the site will be by an extension of Westplex Avenue to West 3rd Street, an angled parking boulevard paralleling west 3rd Street and S. Patterson Drive in front of buildings 2, 3 and 4, and a connecting drive to W. Isaac Drive which has access to S. Patterson Drive. To reduce the number of conflicting turning movements at West 3rd Street into the angled parking area a concrete median could be installed in West 3rd street to prohibit west bound U-Turns into the angled parking boulevard while still maintaining west bound left turns into Westplex Avenue.

During the previous construction of West Isaac Drive, 5 water quality structures were installed along the north edge of pavement to collect storm water runoff from lot 2 and West Isaac Drive. These devices remove sediment, trash and oil prior to being discharged into introduced rain gardens along the restored intermittent stream. The

runoff from lot 1 will also drain to a rain garden southwest of building 5 for filtering and treatment before being discharge to the restored intermittent stream.

Pedestrian-friendly, Townhouse-Style Multi Family Design (by CSO Architects)

The design of the Patterson Pointe project strives to fully and completely embrace the direction and intent of the PUD District Ordinance, creating a walkable, pedestrian-friendly, townhouse-style development for this important downtown Bloomington property at West 3rd Street & South Patterson Drive.

The buildings fronting on West 3rd Street and South Patterson Drive present very human-scaled, attractively-designed 3 and 4-story facades along very walkable streetscapes with brick pavers, lighting, street furniture and street trees. The first floor retail facades are designed with larger windows, greater detail in the masonry and awnings and varied canopies of both fabric and metal. The (2) upper floors provide high quality, attractive market rate living units with regularly spaced windows and balconies. Enhancing the pedestrian experience, the building facades are broken down into individual brick and limestone façades that are 24' wide, alternating with 10'-18' recessed areas of cement board siding, panels and trim. Thus the 34'-42' regular façade plane modules and recesses, as well as the varied palette of attractive materials, help create a very pleasant, townhouse-like rhythm and appearance to the facades that greatly enhances the pedestrian-friendly walkability of the development.

The development on Parcel B is similar in its new urbanist design approach, incorporating a pleasant variety of façade planes and recesses, enhanced masonry detailing at the first floor, and a varied palette of brick and cement board siding colors to break down the facades to a very human scale. Adding still further to the pedestrian-friendly, townhouse-like design approach, the first floor living units offer individual elevated entrance stoops with individual sidewalk approaches, interspersed with street trees. And the Parcel B building is further broken down by its "2 building" design, which adopts one architectural style on the south half and another distinct but complimentary architectural style on the north half.

All of the buildings incorporate a regular rhythm of operable double-hung windows and an interesting variety of flat and gabled roofs of different orientation, which further breaks down the scale and mass of the buildings, enhances their aesthetics and contributes to the pedestrian-friendly, townhouse-like design of the development as seen from West 3rd Street and South Patterson Drive.

Exterior Finish Materials of Construction:

- Brick
- Cementitious siding, panels and trim
- Limestone
- Possibly some split faced and/or ground faced block

- EIFS possible as an accent material in very limited amounts
- Pitched roofs with Asphalt shingles
- Some flat membrane-type roofs

Landscaping Note:

Area A2 (Lot 1) will include restoration of a natural stream channel as part of this site development project. The stream was previously developed by removing an existing 36" RCP storm culvert that bisects the northern portion of the site. The current project will further propose to create natural over bank areas in a park-like setting. This area will provide water quality enhancement for the existing channel, as well as enhancement for storm water runoff from the development site. Proposed rain garden areas will also be located within the area to reduce the number of point source discharges to the new channel.

Revisions since November Plan Commission:

- Revised the routing and design of the restored intermittent stream area to achieve more natural, meandering pattern including two new rain garden areas south of the stream before stormwater enters the stream from the parking and building areas.

- Removed culverts under vehicular bridges over stream area and replaced with abutments and walls to better resemble bridges. This also allowed for keeping large existing trees just east of the extended Westplex Drive.

- Developing more information for the traffic safety at Westplex and 3rd Street and new traffic that would turn into the parking drive in front of buildings 2, 3, and 4.

- Revised architecture to better achieve PUD design.

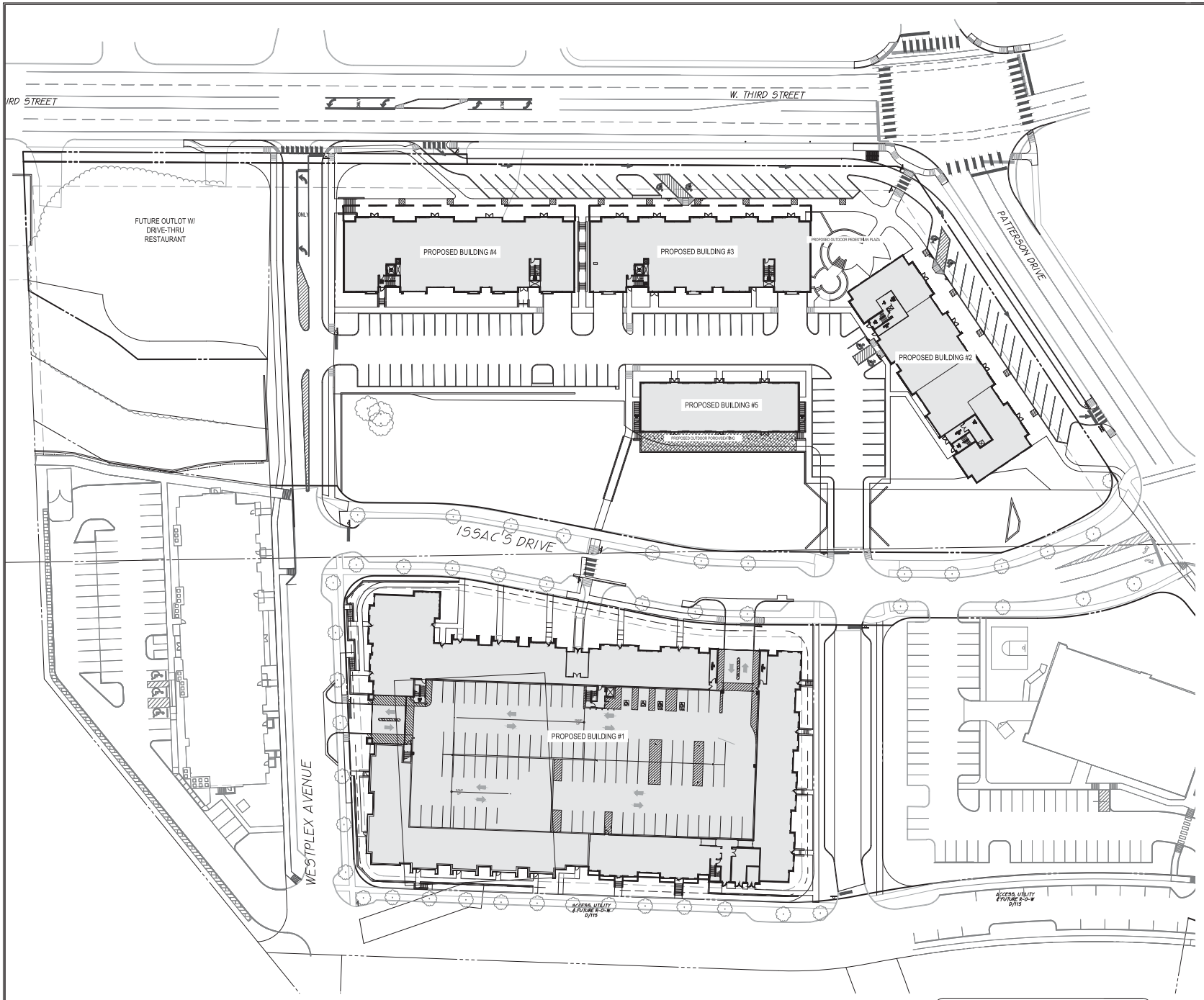
- Added more detail and renderings for the pedestrian plaza area.

After you have had a chance to review our petition please feel free to contact us at any time with questions or clarifications.

Sincerely,

Jeffrey S. Fanyo, PE, CFM

Bynum Fanyo and Associates, Inc.



NOTE TO CONTRACTOR

CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS & DEPTHS AND NOTIFY ENGINEER OF ANY INACCURACIES IN LOCATION OR ELEVATION OR ANY CONFLICTS PRIOR TO & AFTER ANY EXCAVATION. NO PAYMENT SHALL BE MADE TO CONTRACTOR FOR UTILITY DESTRUCTION OR UNDERGROUND CHANGES REQUIRED DUE TO CONFLICTING ELEVATIONS.

SCALE: 1"=30'

OWNER

CSO Architects
ARCHITECTURE
CIVIL ENGINEERING
PLANNING
bloomington, indiana
(812) 339-2960 (FAX)
BYNUM FANYO & ASSOCIATES, P.C.
528 north walnut street
(812) 332-8030

PROJECT:
Patterson Pointe
Bloomington, Indiana

SCOPE DRAWINGS:

REVISIONS:

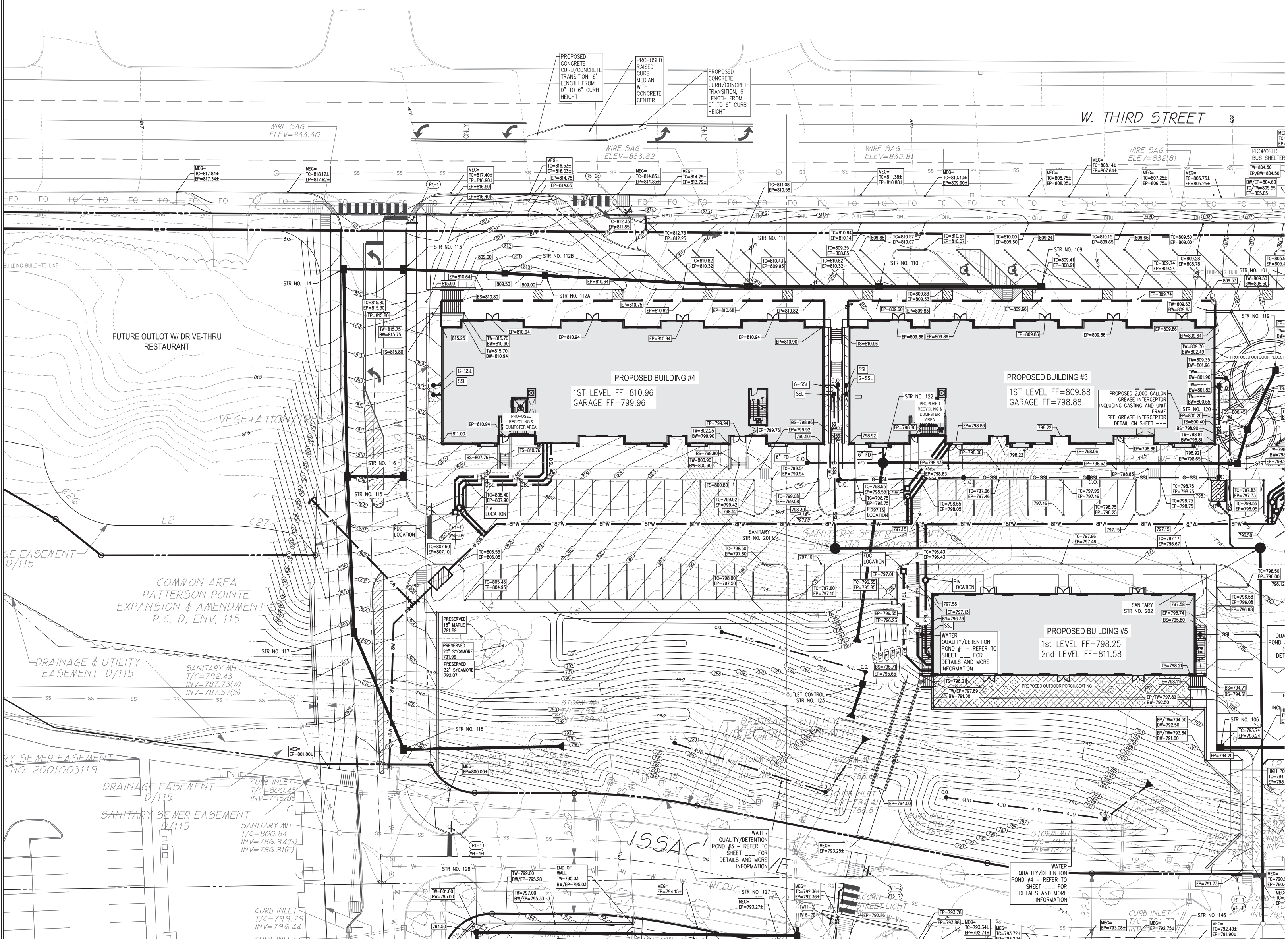
ISSUE DATE	DRAWN BY	CHECKED BY
xx/xx/2016	DJB	JSF

DRAWING TITLE:
OVERALL SITE IMPROVEMENT PLAN

CERTIFIED BY:

DRAWING NUMBER
C301

PROJECT NUMBER
401645



NOTE TO CONTRACTOR

CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS & DEPTHS AND NOTIFY ENGINEER OF ANY INACCURACIES IN LOCATION OR ELEVATION OR ANY CONFLICTS PRIOR TO & AFTER ANY EXCAVATION. NO PAYMENT SHALL BE MADE TO CONTRACTOR FOR UTILITY DESTRUCTION OR UNDERGROUND CHANGES REQUIRED DUE TO CONFLICTING ELEVATIONS.

SCALE: 1"=20'

OWNER

CSO Architects
ARCHITECTURE • INTERIOR DESIGN
8831 Keystone Crossing • Indianapolis, IN 46240
Main 317.848.7800 • csoinc.net

BYNUM FANYO & ASSOCIATES, INC.
ARCHITECTURE
CIVIL ENGINEERING
PLANNING
528 north walnut street, bloomington, indiana
(812) 332-8030 (812) 339-2990 (Fax)

PROJECT:
Patterson Pointe
Bloomington, Indiana

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.
The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract.
On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

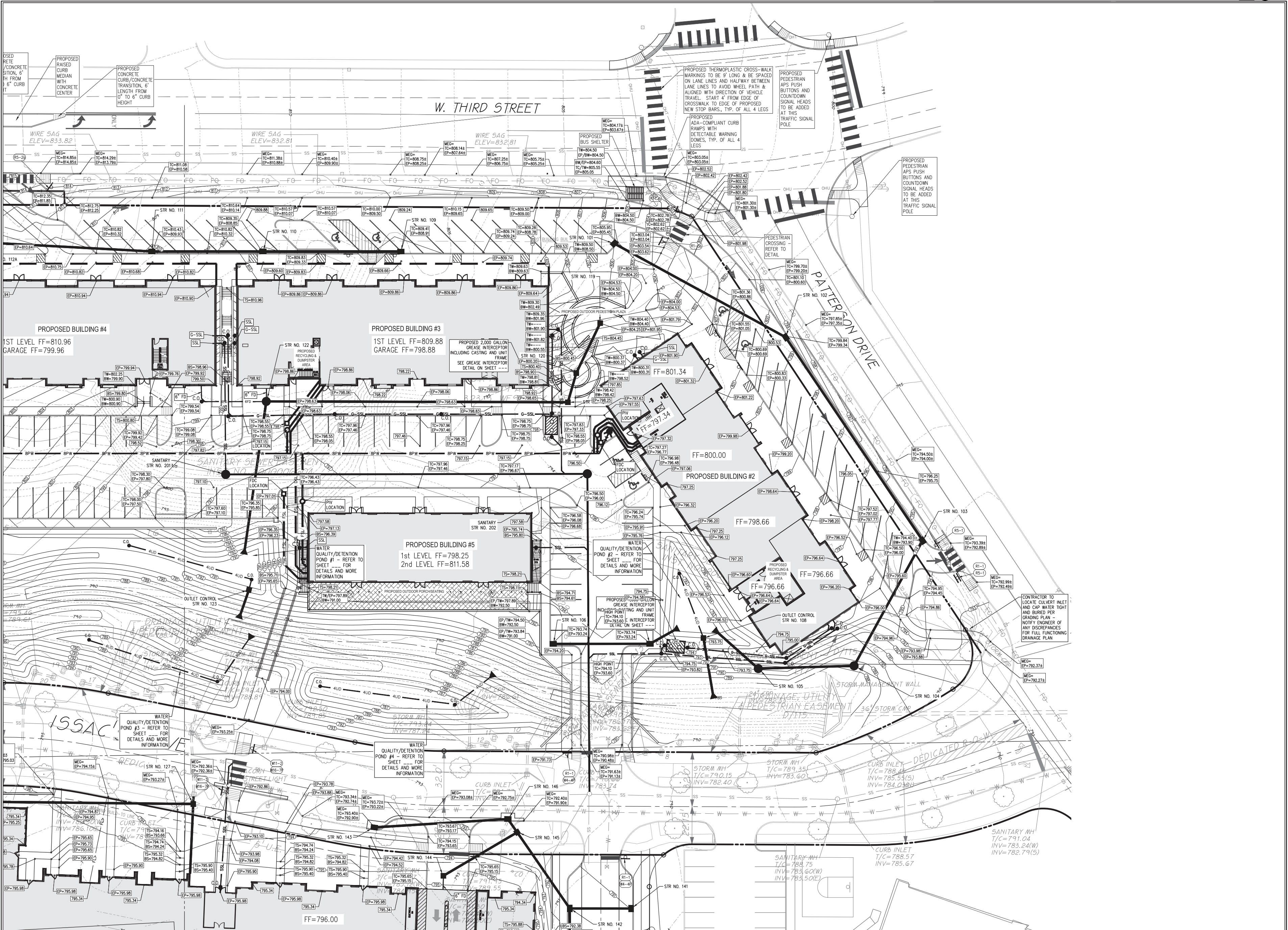
ISSUE DATE	DRAWN BY	CHECKED BY
xx/xx/2016	DJB	JSF

DRAWING TITLE:
ENLARGED 'NORTHWEST' SITE IMPROVEMENT PLAN

CERTIFIED BY:

DRAWING NUMBER
C302

PROJECT NUMBER
401645



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SCALE: 1"=20'

OWNER

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528 north walnut street
bloomington, indiana
(812) 332-8030
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PROJECT:
Patterson Pointe
Bloomington, Indiana

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On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

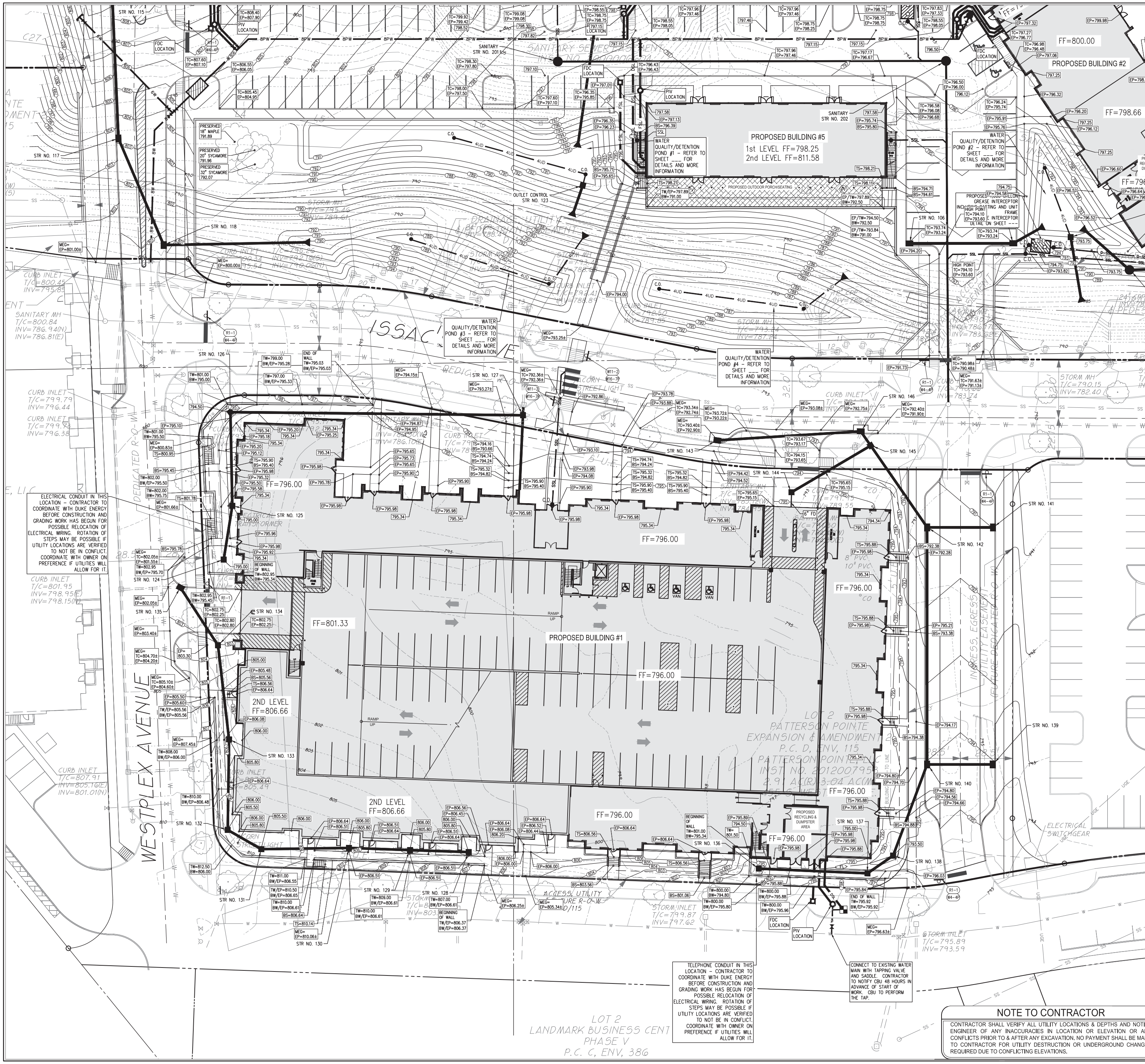
ISSUE DATE	DRAWN BY	CHECKED BY
xx/xx/2016	DJB	JSF

DRAWING TITLE:
ENLARGED 'NORTHEAST' SITE IMPROVEMENT PLAN

CERTIFIED BY:

DRAWING NUMBER
C303

PROJECT NUMBER
401645



OWNER

CSO Architects
ARCHITECTURE • INTERIOR DESIGN
8831 Keystone Crossing • Indianapolis, IN 46240
Main 317.848.7800 • csoinc.net

BYNUM FANYO & ASSOCIATES, INC.
ARCHITECTURE
CIVIL ENGINEERING
PLANNING
528 north walnut street
bloomington, indiana
(812) 332-8030
(812) 339-2990 (Fax)

PROJECT:
Patterson Pointe
Bloomington, Indiana

SCOPE DRAWINGS:

These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.

The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract.

On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

ISSUE DATE	DRAWN BY	CHECKED BY
xx/xx/2016	DJB	JSF

DRAWING TITLE:
ENLARGED 'SOUTHWEST' SITE IMPROVEMENT PLAN

CERTIFIED BY:

DRAWING NUMBER
C304

PROJECT NUMBER
401645

BUILDING 1 WEST ELEVATION

BUILDING 1 EAST ELEVATION

BUILDING 1 SOUTH ELEVATION

BUILDING 1 NORTH ELEVATION

BUILDING 2 SOUTH ELEVATION

SCALE: 1/8" = 1'-0"

BUILDING 2 NORTH ELEVATION

SCALE: 1/8" = 1'-0"

CSO Architects

Building 2		Brick		Fiber Cement		Cast Stone	
North	9377.9	2370.9	25.3%	3207.1	34.2%	4493	47%
East	3405.4	1934.1	56.8%	1043.0	30.6%	1246	3.7%
South	9802.4	2241.5	22.9%	4103.2	41.9%	5873	6.0%
West	3127.4	2076.9	66.4%	524.2	16.8%	1097	3.2%
Total	25714.1	8623.4	33.5%	8877.5	34.5%	13043	5.4%

Patterson Pointe

Bloomington, IN | 3 January 2017

3 2A301 **BUILDING 2 WEST ELEVATION**
SCALE: 1/8" = 1'-0"

2 2A301 **BUILDING 2 EAST ELEVATION**
SCALE: 1/8" = 1'-0"

Building 2		Brick		Fiber Cement		Cast Stone	
North	9377.6	2370.9	25.3%	3207.1	34.2%	445.3	4.7%
East	3405.4	1934.1	56.8%	1043.0	30.6%	194.6	5.7%
South	9832.4	2241.5	22.9%	4103.2	41.9%	587.9	6.0%
West	3127.4	2076.9	66.4%	524.2	16.8%	166.7	5.3%
Total	25714.1	8623.4	33.5%	8877.5	34.5%	1394.3	5.4%

BUILDING 3 SOUTH ELEVATION

SCALE: 1/8" = 1'-0"

BUILDING 3 NORTH ELEVATION

SCALE: 1/8" = 1'-0"

CSO Architects

Building 3		Brick		Fiber Cement		Cast Stone	
North	6973.7	3137.3	45.0%	973.6	14.0%	284.4	4.1%
East	2805.5	1570.8	56.0%	715.9	25.5%	84.4	3.0%
South	8551.0	2845.2	33.5%	3753.0	43.9%	459.0	5.4%
West	2805.5	1570.8	56.0%	715.9	25.5%	84.4	3.0%
Total	21135.8	9144.1	43.3%	6158.4	29.1%	912.2	4.3%

BUILDING 3 WEST ELEVATION

SCALE: 1/8" = 1'-0"

BUILDING 3 EAST ELEVATION

SCALE: 1/8" = 1'-0"

Building 3		Brick		Fiber Cement		Cast Stone	
North	6973.7	3137.3	45.0%	973.6	14.0%	284.8	4.1%
East	2805.5	1570.8	56.0%	715.9	25.6%	84.4	3.0%
South	8551.0	2865.2	33.5%	3753.0	43.9%	459.0	5.4%
West	2805.5	1570.8	56.0%	715.9	25.6%	84.4	3.0%
Total	21135.8	9144.1	43.3%	6160.4	29.1%	912.2	4.3%

BUILDING 4 SOUTH ELEVATION

SCALE: 1/8" = 1'-0"

BUILDING 4 NORTH ELEVATION

SCALE: 1/8" = 1'-0"

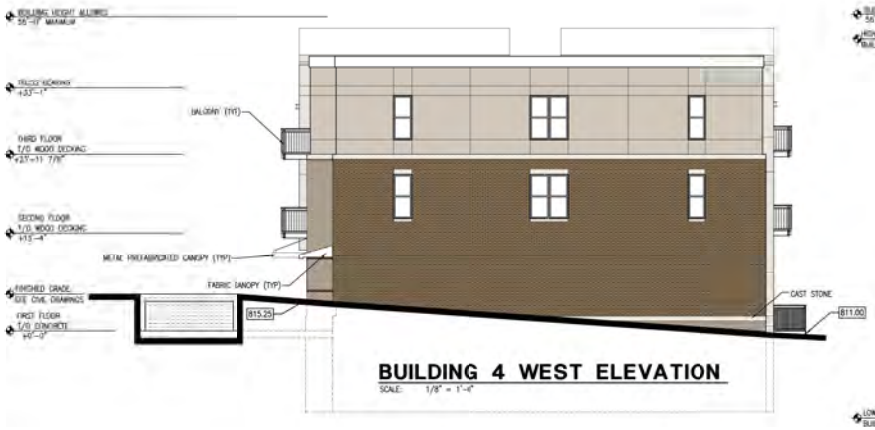
CSO Architects

Building 4		Brick		Fiber Cement		Cast Stone	
North	7120.8	3794.1	53.3%	1379.8	19.4%	276.9	3.8%
East	2899.5	1708.0	61.0%	860.6	30.7%	88.4	3.2%
South	6189.6	1604.0	39.6%	3919.0	47.9%	147.3	1.8%
West	2289.8	1238.4	54.1%	860.1	37.8%	58.	2.5%
Total	20333.5	7344.4	36.0%	7019.6	34.4%	583.5	2.8%

Patterson Pointe

Bloomington, IN | 3 January 2017

160176



BUILDING 4 WEST ELEVATION

SCALE: 1/8" = 1'-0"

BUILDING 4 EAST ELEVATION

SCALE: 1/8" = 1'-0"

Building 4		Brick		Fiber Cement		Cast Stone	
North	7101.6	2784.1	39.3%	1378.6	19.4%	269.6	3.8%
East	2809.5	1708.0	61.0%	860.8	30.7%	88.4	3.2%
South	8189.6	1604.0	19.6%	3918.0	47.9%	147.6	1.8%
West	2289.8	1238.4	54.1%	860.1	37.6%	59.1	2.5%
Total	20371.5	7344.4	36.0%	7018.8	34.4%	563.3	2.8%

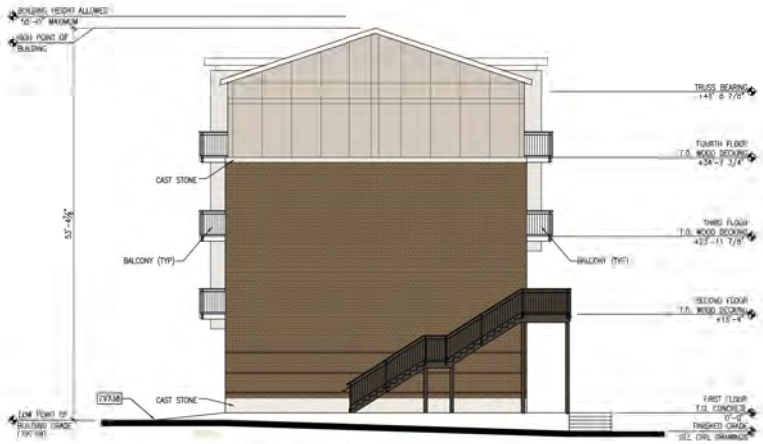
BUILDING 5
SOUTH ELEVATION

A
5A301

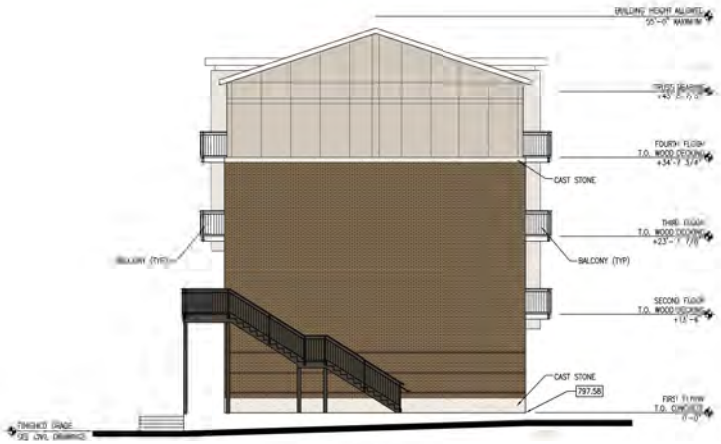
SCALE: 1/8" = 1'-0"

BUILDING 5
NORTH ELEVATION

SCALE: 1/8" = 1'-0"



BUILDING 5
WEST ELEVATION



BUILDING 5
EAST ELEVATION

BUILDINGS 3, 4, & 5

FROM BUILDING 1

BUILDINGS 3 & 4
LOOKING AT BUILDING 1

BUILDING 1
FROM CREEK

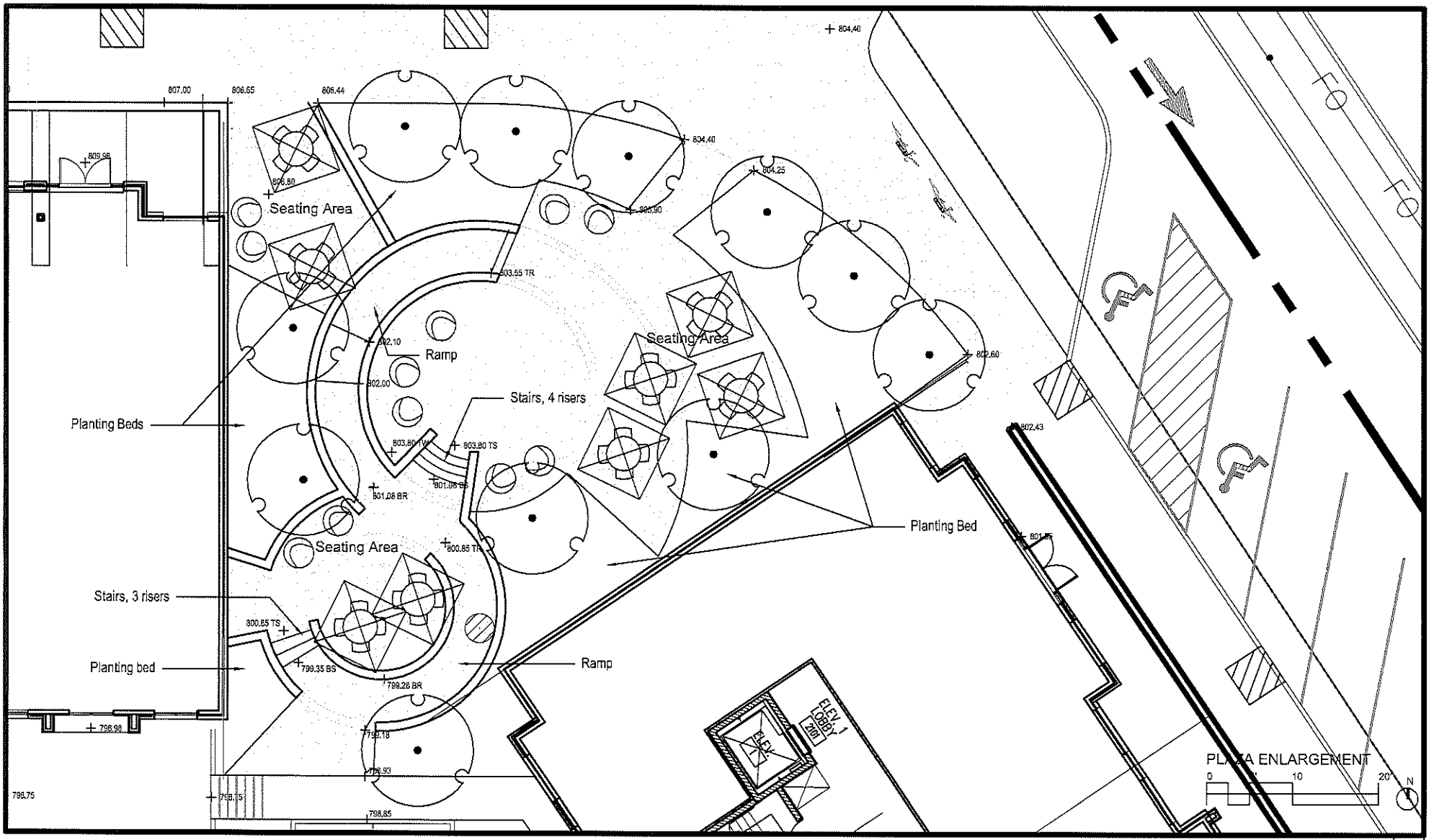
BUILDING 1
FROM PATTERSON DR

BUILDINGS 3 & 4
FROM 3rd ST

BUILDING 3
FROM 3rd ST

PLAZA
FROM 3rd ST

PLAZA
FROM 3rd ST

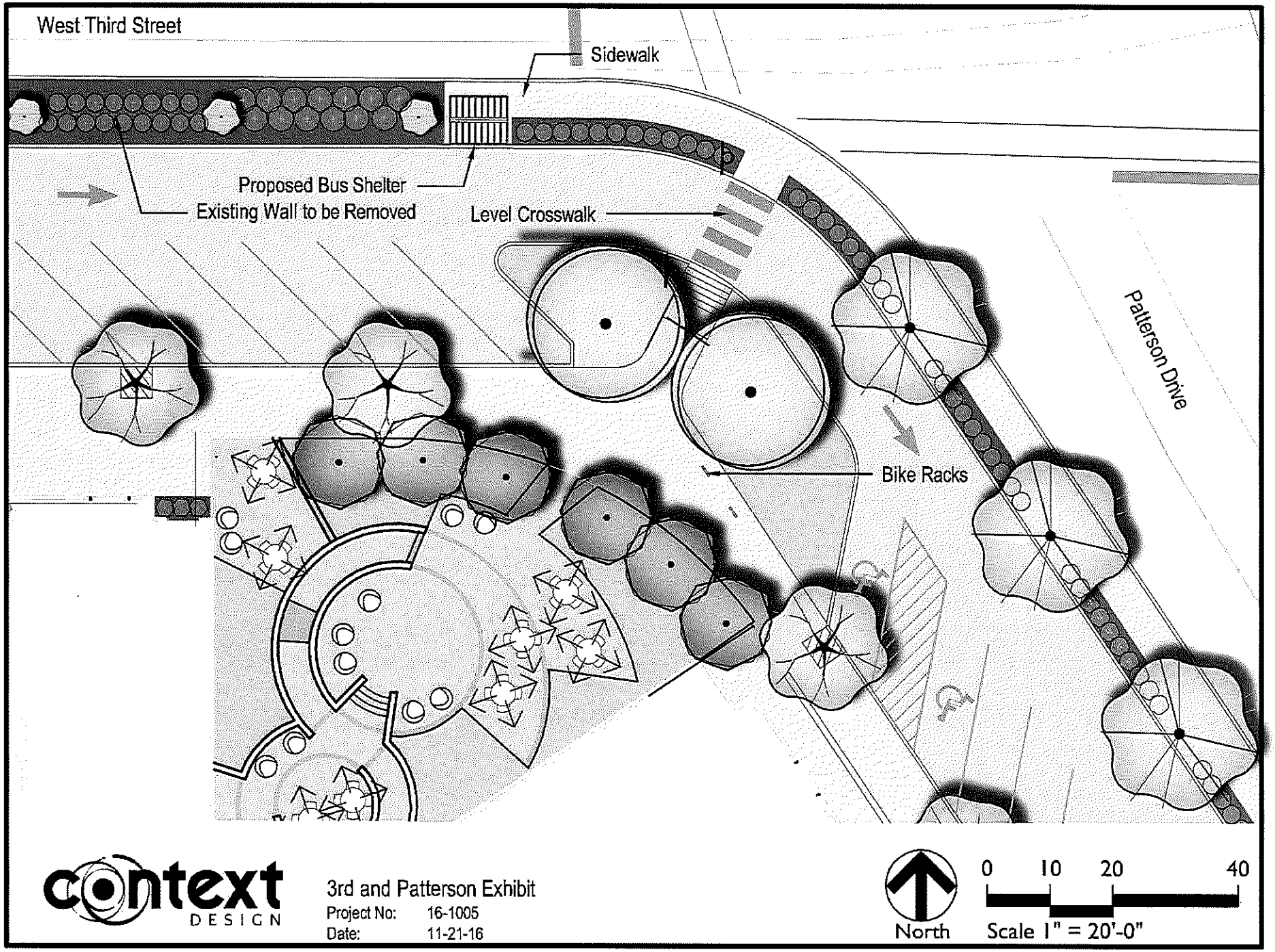


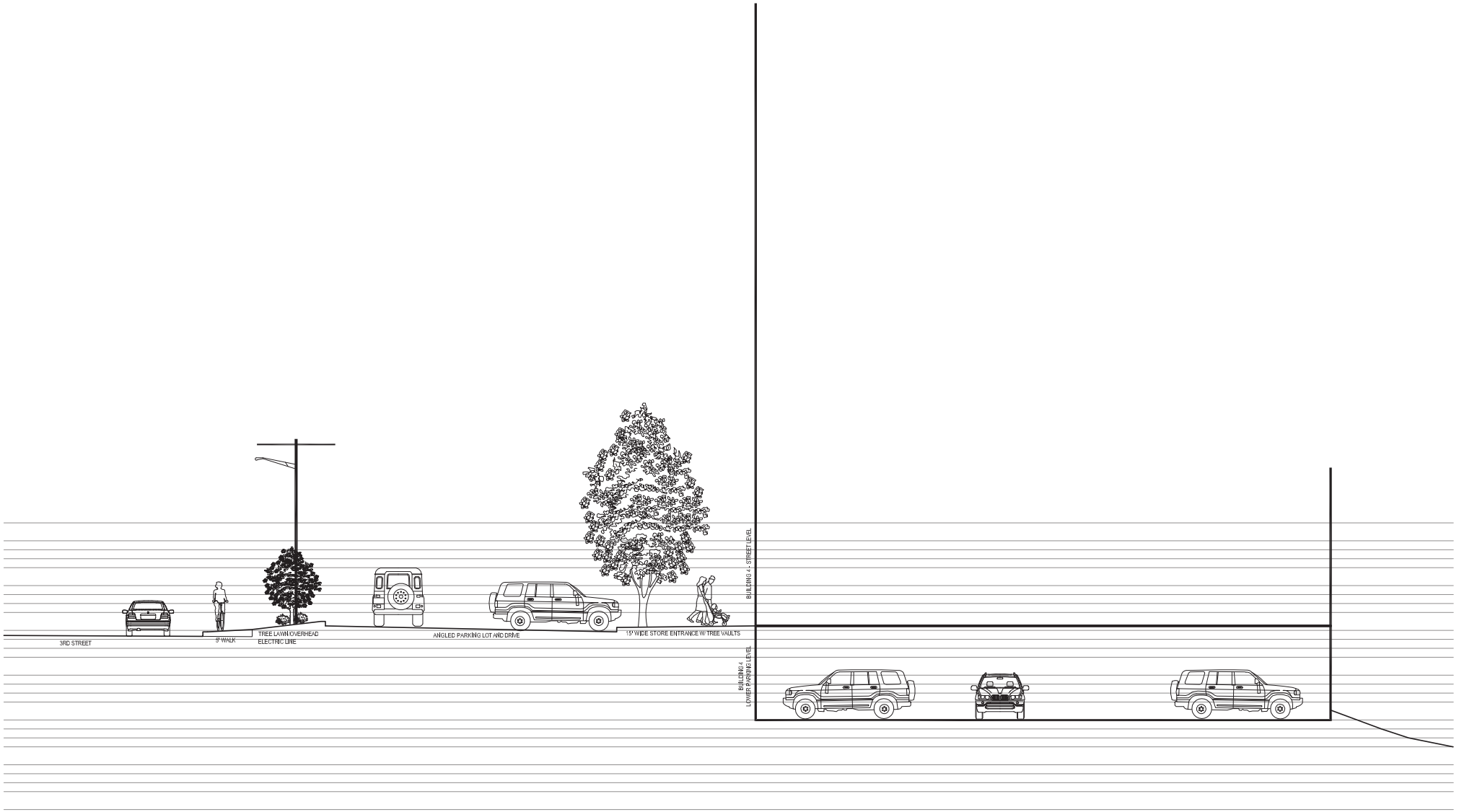
CSO Architects
ARCHITECTURE + INTERIOR DESIGN

context DESIGN
12 S Main St, Ste 200 | Fortville, IN 46040
317-485-5900 | www.context-design.com

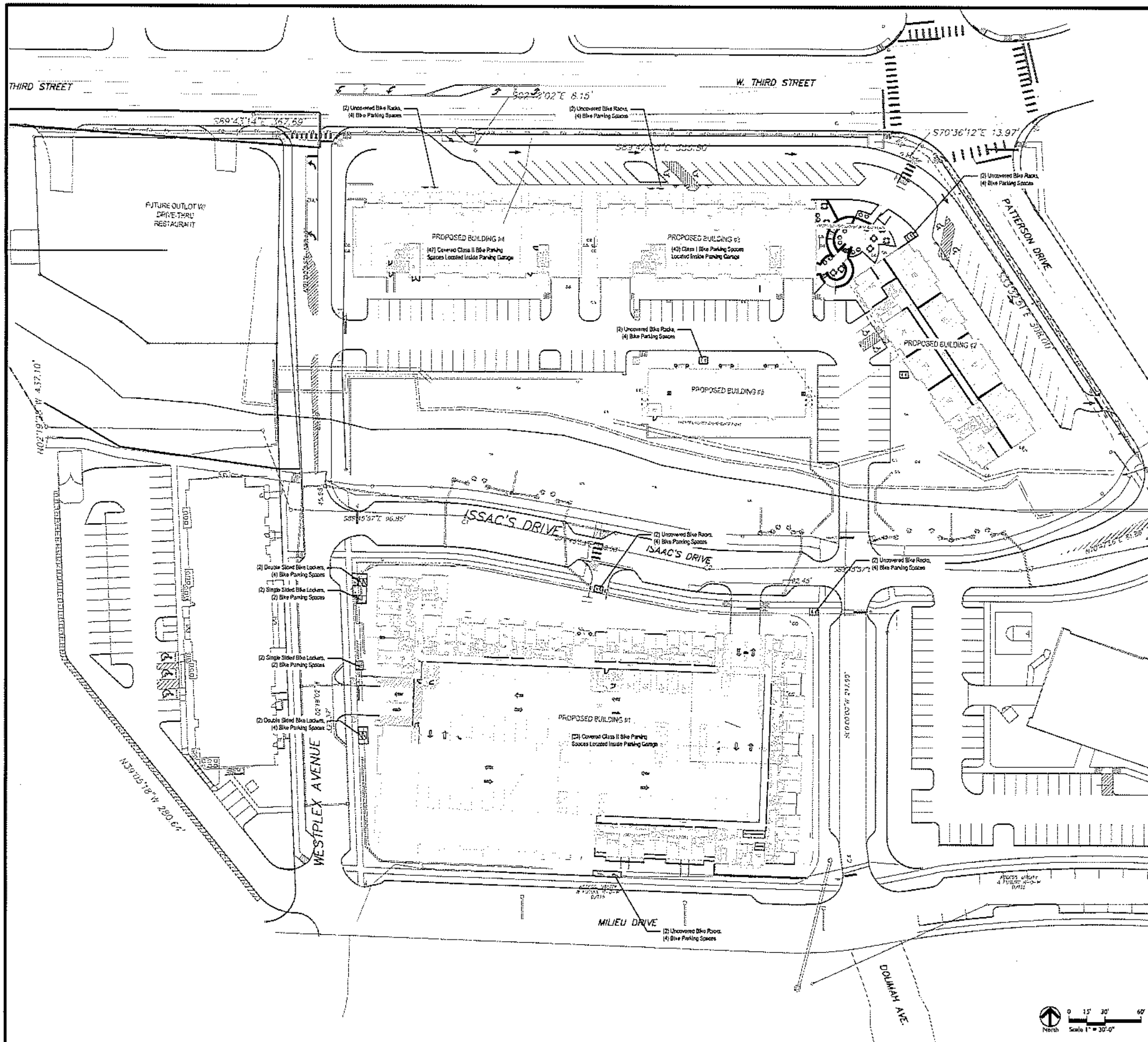
Bloomington, Indiana | August 01, 2016

16076


West Third Street
Sidewalk
Proposed Bus Shelter
Existing Wall to be Removed
Level Crosswalk
Patterson Drive
Bike Racks
context DESIGN
3rd and Patterson Exhibit
Project No: 16-1005
Date: 11-21-16
North
0 10 20 40
Scale 1" = 20'-0"



3RD STREET CROSS SECTION
Scale: 1" = 10'-0"



BIKE PARKING

LOT 1

Required: 35 Spaces (72 Units, 205 Beds)
9 Class I Spaces
26 Class II Spaces, 18 Covered
9 Short Term Commercial Spaces

Provided: 99 Spaces
43 Class I Spaces
47 Class II Spaces, 47 Covered
16 Short Term Commercial Spaces
(within 50' of each main entrance)

LOT 2

Required: 46 Spaces (106 Units, 272 Beds)
12 Class I Spaces
34 Class II Spaces, 23 Covered

Provided: 46 Spaces
12 Class I Spaces
34 Class II Spaces, 23 Covered
(within 50' of each main entrance)

CSO Architects
ARCHITECTURE + INTERIOR DESIGN

context DESIGN

PROJECT:
Patterson Pointe
Bloomington, Indiana

SCOPE DRAWINGS:

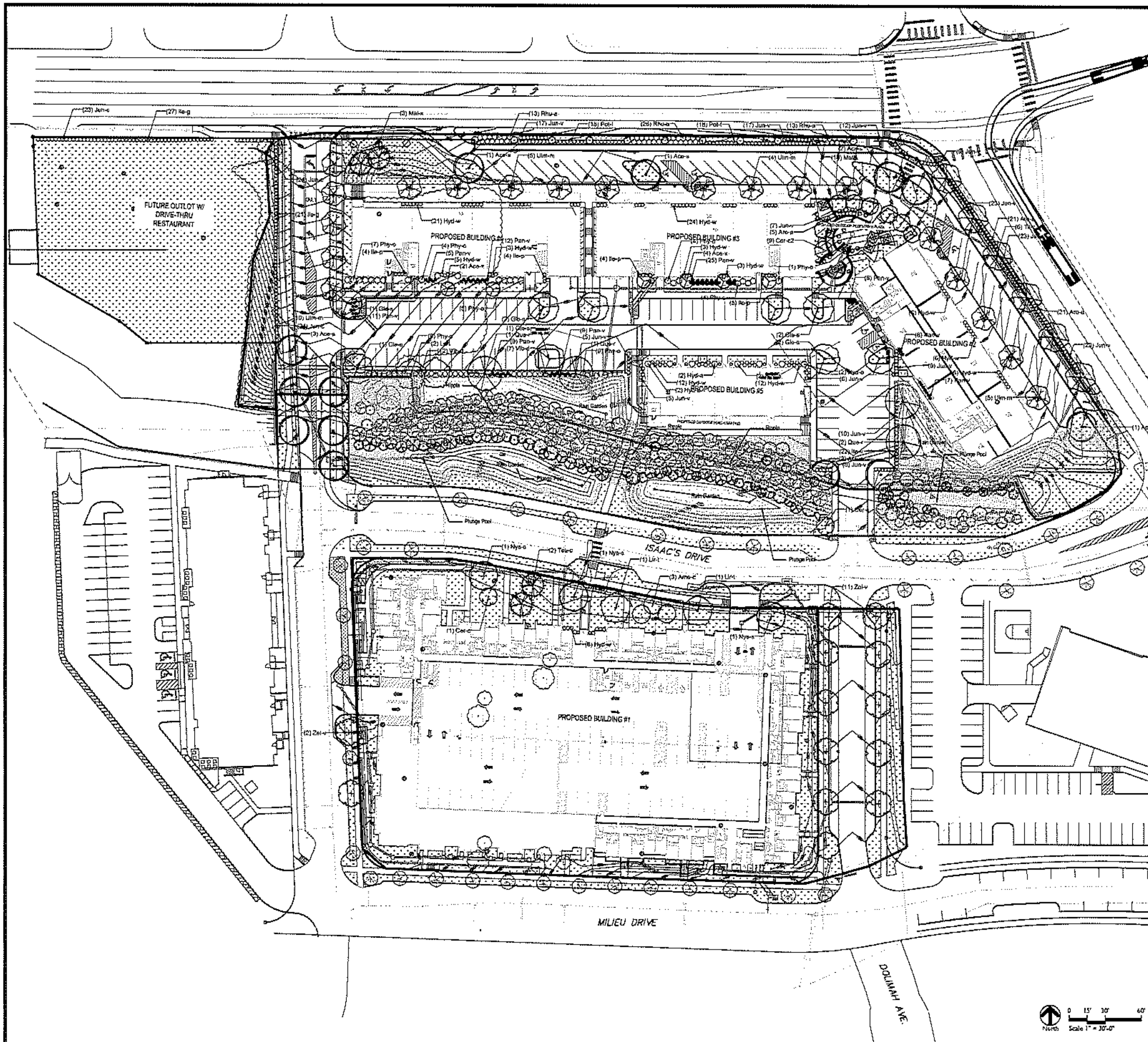
REVISIONS:

DRAWING TITLE:
BIKE PARKING PLAN

CERTIFIED BY:
EXPIRES 12/31/2017

DRAWING NUMBER
BIKE

PROJECT NUMBER
18076



GENERAL LANDSCAPE AND PLANTING NOTES

1. Refer to Project Manual for Planting Specifications and Topsoil requirements. Refer to Plant Schedule and Planting Details for additional information.
2. All materials are subject to the approval of the Landscape Architect and Owner at any time. Landscape Architect to inspect all plant locations and plant bed conditions prior to installation. On-site adjustments may be required.
3. Rootballs shall meet or exceed size standards as set forth in "American Standards for Nursery Stock". MAIN LEADERS OF ALL TREES SHALL REMAIN INTACT.
4. Remove from the site any plant material that turns brown or defoliates within five (5) days after planting. Replace immediately with approved, specified material.
5. Plant counts indicated on drawings are for Landscape Architect's use only. Contractor shall make own plant quantity takeoffs using drawings, specifications, and plant schedule requirements (i.e., spacing), unless otherwise directed by Landscape Architect. Contractor to verify bed measurements and install appropriate quantities as governed by plant spacing per schedule. Plant material quantities shown on plan are minimum quantities. Additional material may be needed to meet spacing requirements and field conditions.
6. Seed all areas disturbed by construction activities that are not otherwise noted to receive pavement, planting bed, or sod treatment.
7. The Contractor shall install and/or amend topsoil in all proposed bed areas to meet Specifications. Contractor shall coordinate quantity and placement of topsoil. Landscaper shall verify depth of topsoil prior to plant installation. (Refer to specifications for topsoil source and placement requirements)
8. All tree locations shall be marked with 2x2" stakes prior to planting for review and approval by the Landscape Architect. Any plant material installed in an incorrect location, by the judgment of the Landscape Architect, shall be reinstalled at the Contractor's expense.
9. All plant beds shall receive 3" minimum of shredded hardwood bark mulch (unless otherwise noted).
10. Verify all utility locations in the field prior to beginning work. Repair all damaged utilities to Owner's satisfaction at no additional cost.
11. The Contractor shall maintain all plant material and lawns until the project is fully accepted by the Landscape Architect, unless otherwise noted.
12. All workmanship and materials shall be guaranteed by the Contractor for a period of one calendar year after Final Acceptance.
13. Install all plant material in accordance with all local codes and ordinances. Coordinate with the Owner to obtain any required permits necessary to complete work.
14. Contractor shall test all tree pits for drainage. Any tree pit that holds water for more than 24 hours shall be installed using tree pit drainage.
15. Tree Protection Fencing is the responsibility of the Contractor. Minimum protected area shall include the full drip line of the canopy. NO construction activities, material storage, etc. may occur within that area. The Contractor shall ensure that no soil compaction or tree damage occurs in any Protected areas, at any time during the construction process.
16. Trees shall be matched in groups unless otherwise noted.

- STREAMSIDE ZONE
- INTERMEDIATE ZONE
- FRINGE ZONE
- RAINGARDENS
- POOL BERM AREA
- LAWN

REFER TO MAINTENANCE MANUAL, APPENDIX D

CSO Architects

context DESIGN

PROJECT:

Patterson Pointe
Bloomington, Indiana

SCOPE DRAWINGS

REVISIONS:

DRAWING TITLE:

PLANTING PLAN

CERTIFIED BY:

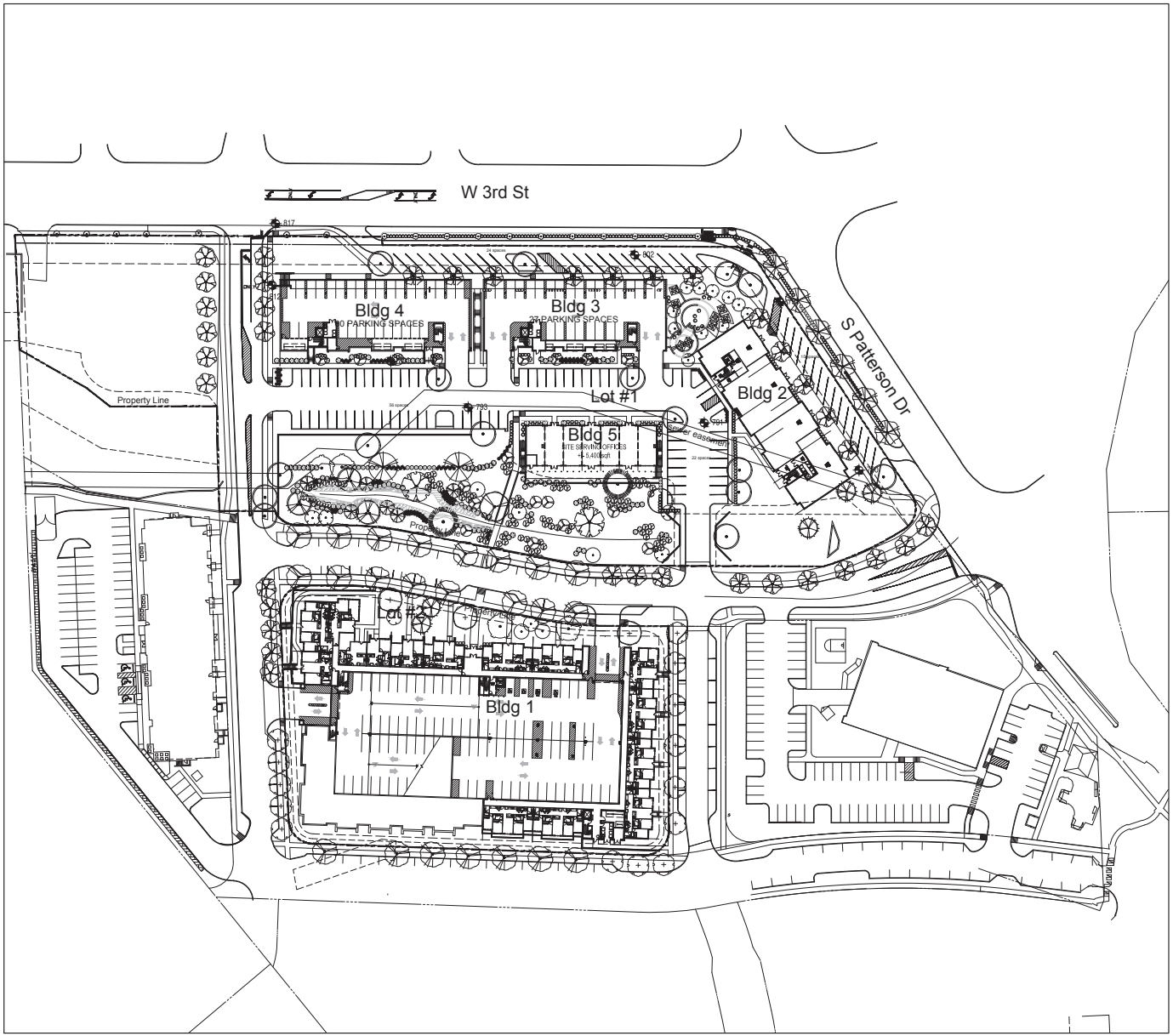
EXPIRES 12/31/2017

DRAWING NUMBER

L100

PROJECT NUMBER

16078



LOT #1 (Area A)

	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
Total Apartments	4	25	21	22	**72**	Units
Total beds	4	50	63	88	205	Beds
DUE	1	16.5	21	33	71.5	

Retail/Amenities:

Retail	+/- 21,700	sqft
Amenities/Leasing Office/Terrace:	+/- 10,900	sqft
Total	+/- 32,600	sqft

Parking Requirements:

Parking Required for Apartments:	0.9/Bedroom:	185	Spaces max
Parking Req. for Retail:	1/250 SF	133	Spaces
Total Parking Required for Lot #1:		318	Spaces

Parking Provided:

Garage Parking:	57	Spaces
Street & Surface Parking:	130	Spaces
Total Parking Spaces Provided on Lot #1:	187	Spaces

LOT #2 (Area B)

	S	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
Total Apartments	6	28	17	16	39	106	Units
Total beds	6	28	34	48	156	272	Beds
DUE	1.5	7	11.22	16	58.5	94.22	

Parking Requirements:

Parking Required for Apartments:	0.9/Bedroom:	247	Spaces max
Total Parking Required for Lot #2:		247	Spaces

Parking Provided:

Floor	Totals
1st Floor: Incl. ramp plus spaces under ramp:	105
2nd Floor	105
3rd Floor	100
Total Garage Spaces:	310
Street & Surface Parking:	55

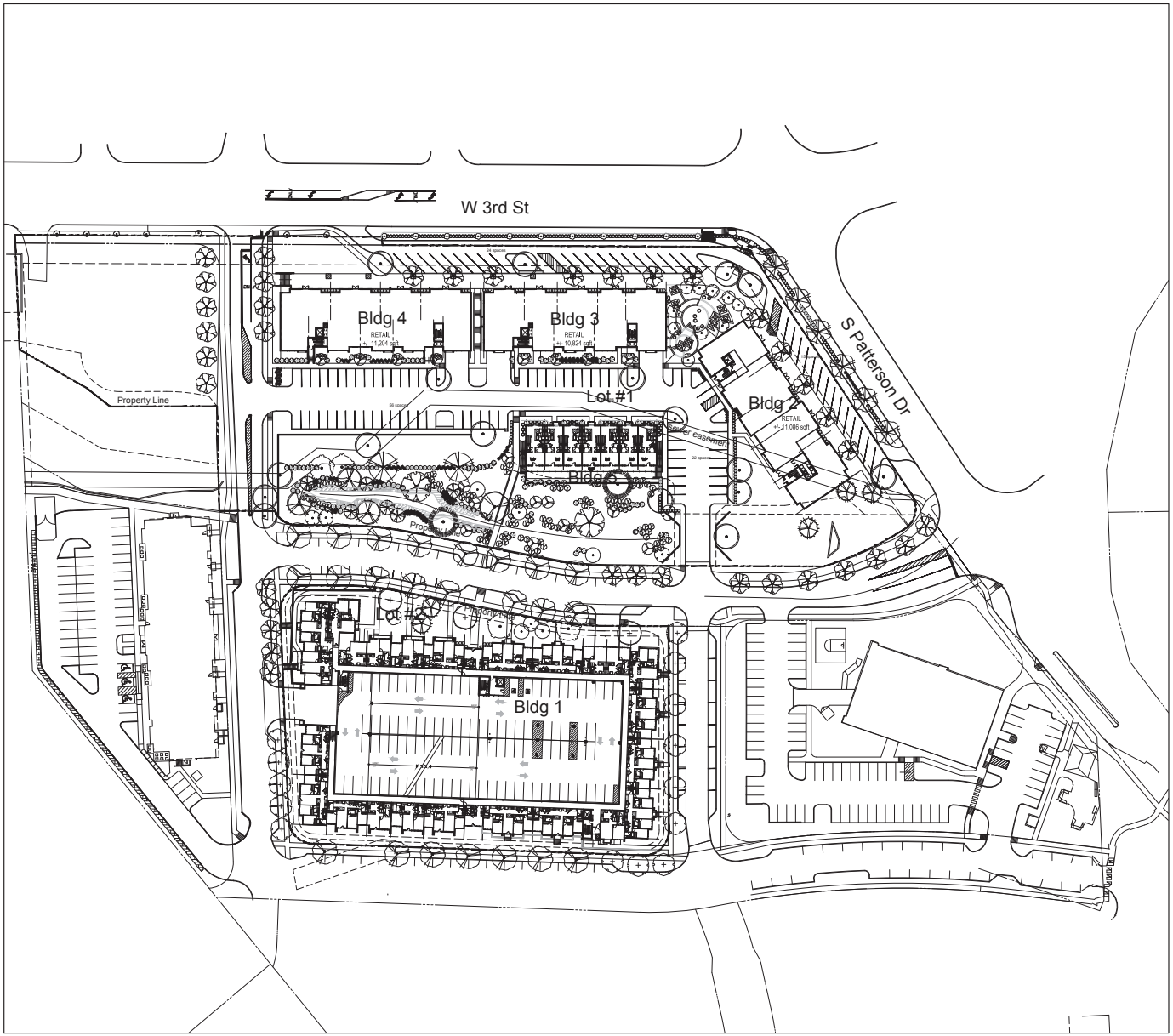
Total Parking Spaces Provided on Lot #2:	365	Spaces
Total Parking needed (Lot #1 + #2)	565	Spaces
Total Parking provided (Lot #1 + #2):	552	Spaces
Surplus	-13	Spaces
Total Beds (Lot 1+2)	**479**	Units
Total Apartments (Lot 1+2)	**180**	Units

LEVEL 1 PLAN (LOWEST)

0 25 50 100

SCALE: 1" = 50'

N



LOT #1 (Area A)

Bldg 2

Floor	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
1st Floor	-	-	-	-	-	
2nd Floor	-	3	3	3	9	
3rd Floor	-	3	3	3	9	
4th Floor	-	3	3	3	9	
Total Apartments	-	9	9	9	27	Units

Bldg 3

Floor	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
1st Floor	-	-	-	-	-	
2nd Floor	2	4	4	-	10	
3rd Floor	2	4	4	-	10	
Total Apartments	4	8	8	-	20	Units

Bldg 4

Floor	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
1st Floor	-	-	-	-	-	
2nd Floor	-	4	2	3	9	
3rd Floor	-	4	2	3	9	
Total Apartments	-	8	4	6	**18**	Units

Bldg 5

Townhouse	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
Units	-	-	-	7	7	
Total Apartments	-	-	-	7	**7**	Units
Total Apartments	4	25	21	22	**72**	Units
DUE	1	16.5	21	33	71.5	

LOT #2 (Area B)

Bldg 1

Floor	S	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
1st Floor	-	2	3	2	8		
2nd Floor	2	6	4	4	10		
3rd Floor	2	6	4	5	10		
4th Floor	2	14	6	5	11		
Total Apartments	6	28	17	16	39	106	Units
DUE	1.5	7	11.22	16	58.5	94.22	
Total Apartments (Lot 1+2)	6	32	42	37	61	**178**	Units

LEVEL 2 PLAN

0 25 50 100
SCALE: 1" = 50'

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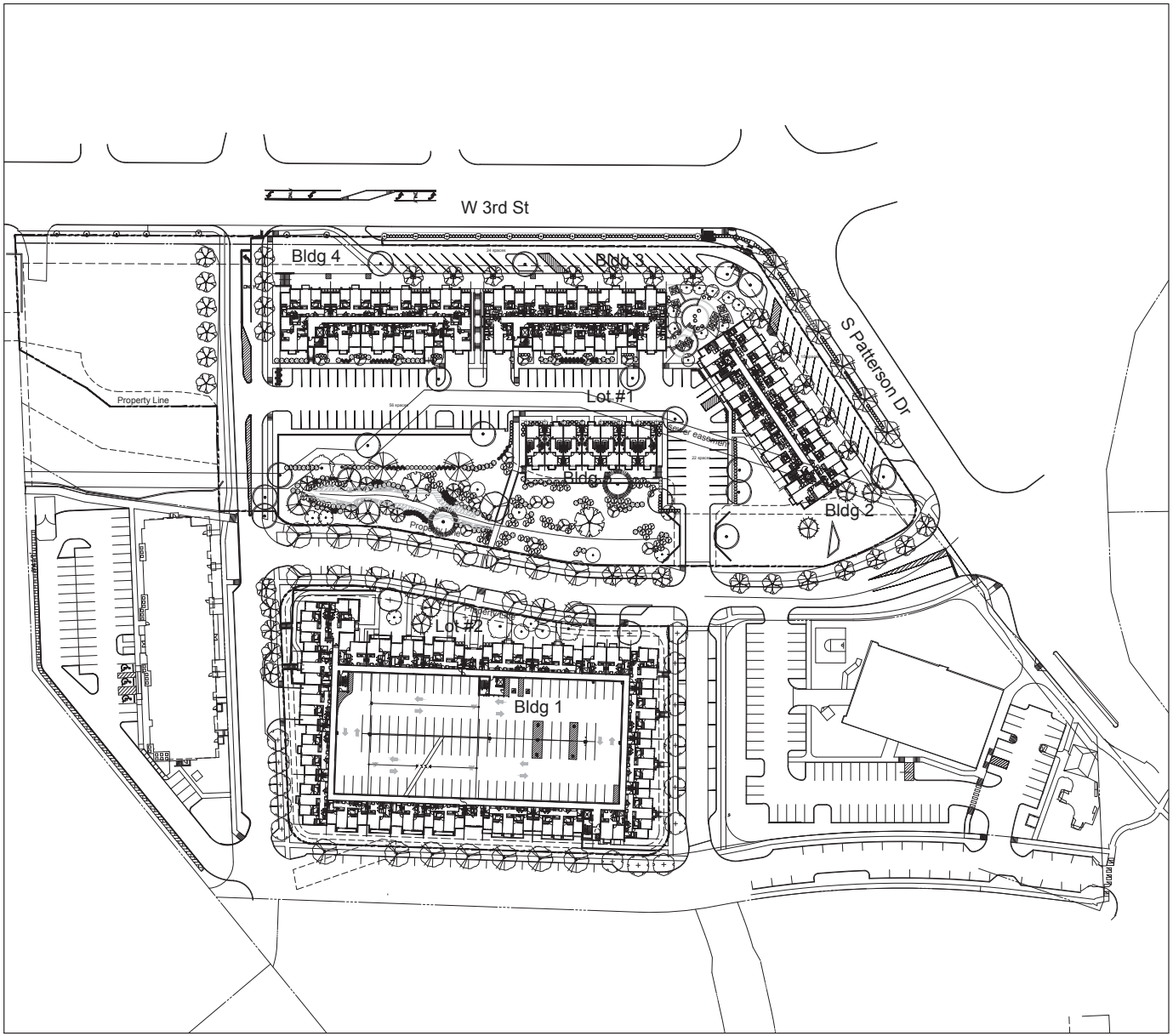


LOT #1 (Area A)

Bldg 2

Floor	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
1st Floor	-	-	-	-	-	
2nd Floor	-	3	3	3	9	
3rd Floor	-	3	3	3	9	
4th Floor	-	3	3	3	9	
Total Apartments	-	9	9	9	27	Units

Bldg 3

Floor	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
1st Floor	-	-	-	-	-	
2nd Floor	2	4	4	-	10	
3rd Floor	2	4	4	-	10	
Total Apartments	4	8	8	-	20	Units

Bldg 4

Floor	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
1st Floor	-	-	-	-	-	
2nd Floor	-	4	2	3	9	
3rd Floor	-	4	2	3	9	
Total Apartments	-	8	4	6	**18**	Units

Bldg 5

Townhouse	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
Units	-	-	-	7	7	
Total Apartments	-	-	-	7	**7**	Units
Total Apartments	4	25	21	22	**72**	Units
DUE	1	16.5	21	33	71.5	

LOT #2 (Area B)

Bldg 1

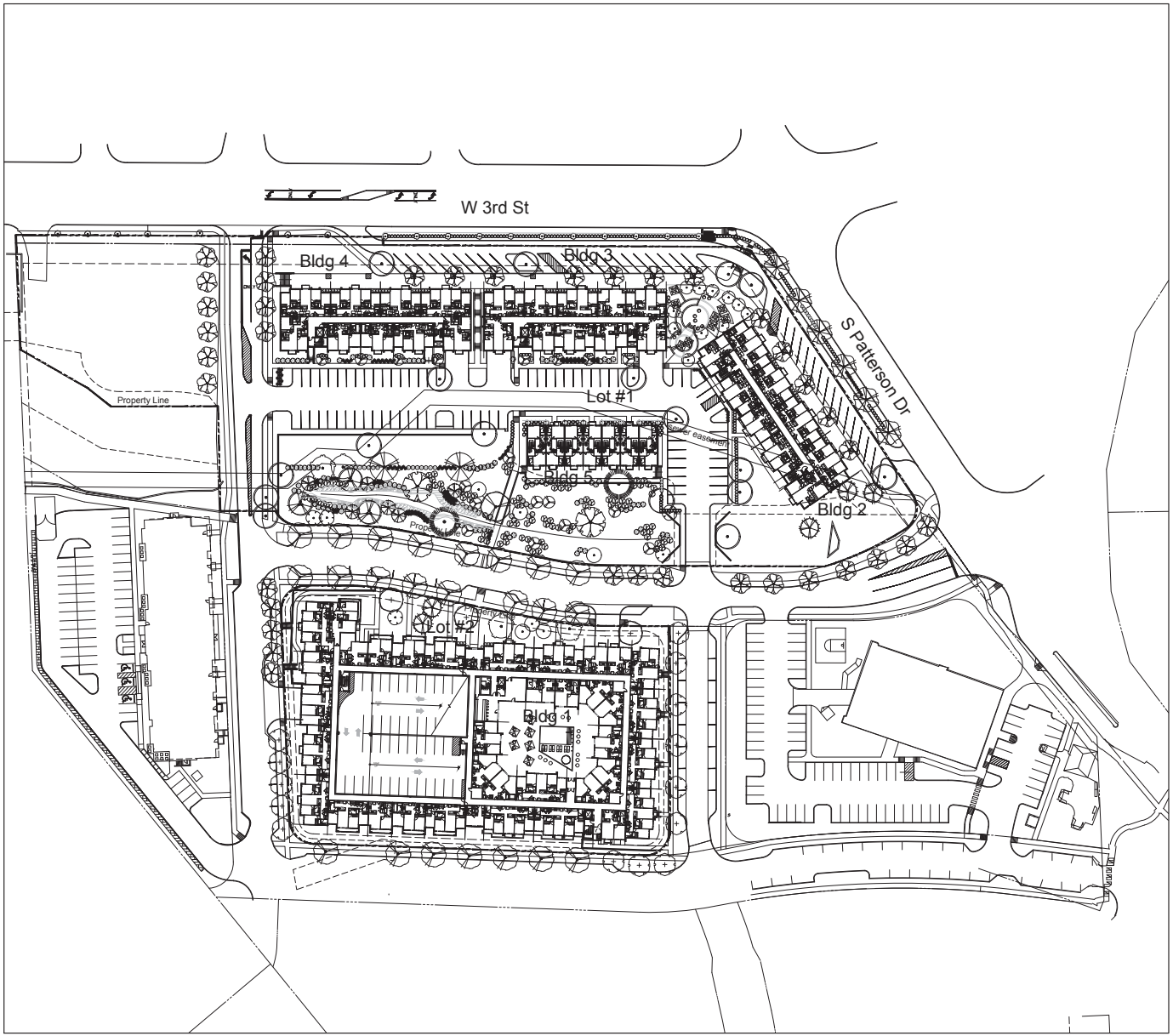
Floor	S	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
1st Floor	-	2	3	2	8		
2nd Floor	2	6	4	4	10		
3rd Floor	2	6	4	5	10		
4th Floor	2	14	6	5	11		
Total Apartments	6	28	17	16	39	106	Units
DUE	1.5	7	11.22	16	58.5	94.22	
Total Apartments (Lot 1+2)	6	32	42	37	61	**178**	Units

LEVEL 3 PLAN

0 25 50 100

SCALE: 1" = 50'

N



LOT #1 (Area A)

Bldg 2

Floor	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
1st Floor	-	-	-	-	-	
2nd Floor	-	3	3	3	9	
3rd Floor	-	3	3	3	9	
4th Floor	-	3	3	3	9	
Total Apartments	-	9	9	9	27	Units

Bldg 3

Floor	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
1st Floor	-	-	-	-	-	
2nd Floor	2	4	4	-	10	
3rd Floor	2	4	4	-	10	
Total Apartments	4	8	8	-	20	Units

Bldg 4

Floor	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
1st Floor	-	-	-	-	-	
2nd Floor	-	4	2	3	9	
3rd Floor	-	4	2	3	9	
Total Apartments	-	8	4	6	**18**	Units

Bldg 5

Townhouse	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
Units	-	-	-	7	7	
Total Apartments	-	-	-	7	**7**	Units
Total Apartments	4	25	21	22	**72**	Units
DUE	1	16.5	21	33	71.5	

LOT #2 (Area B)

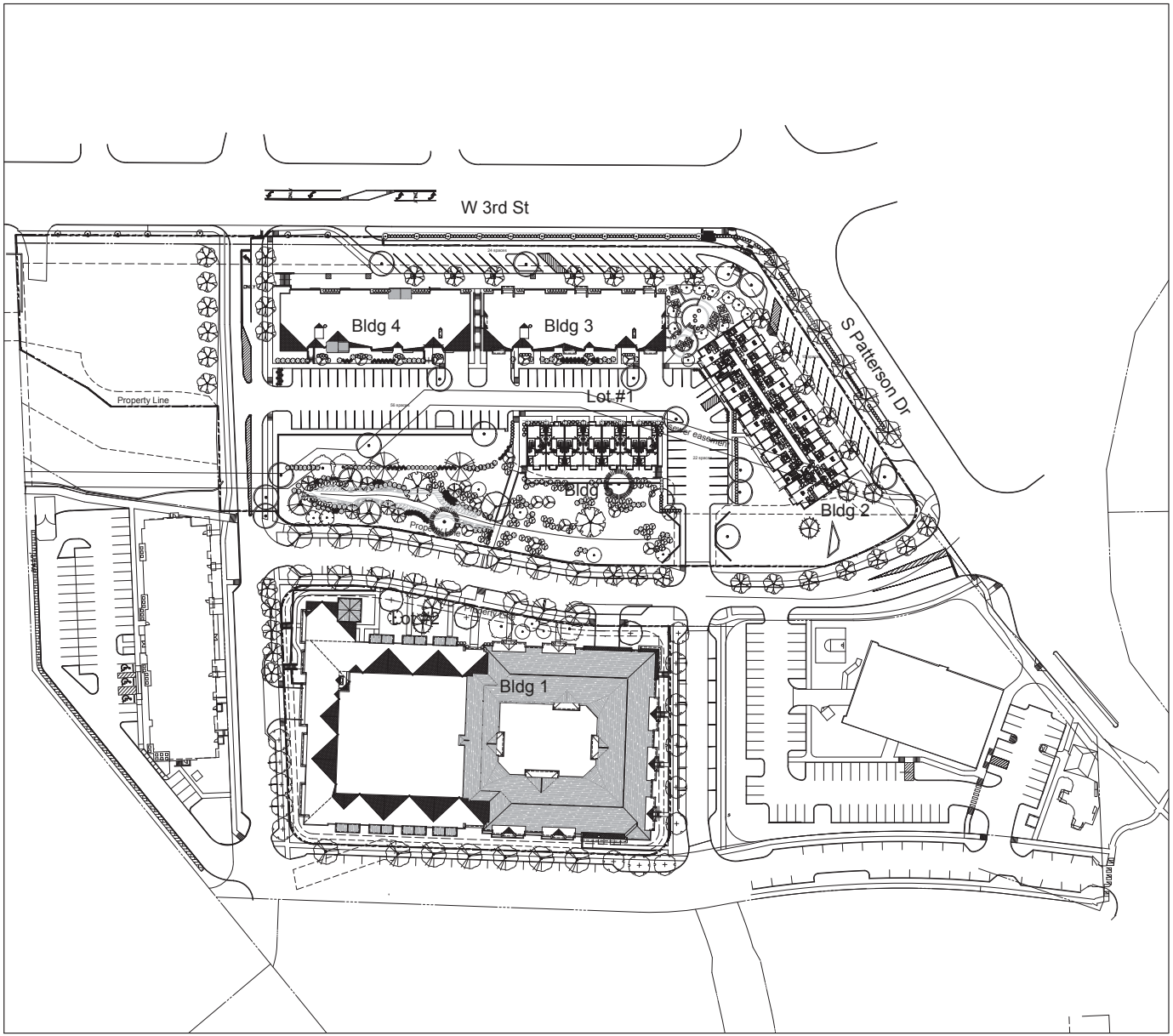
Bldg 1

Floor	S	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
1st Floor	-	2	3	2	8		
2nd Floor	2	6	4	4	10		
3rd Floor	2	6	4	5	10		
4th Floor	2	14	6	5	11		
Total Apartments	6	28	17	16	39	106	Units
DUE	1.5	7	11.22	16	58.5	94.22	
Total Apartments (Lot 1+2)	6	32	42	37	61	**178**	Units

LEVEL 4 PLAN

0 25 50 100
SCALE: 1" = 50'

N



LOT #1 (Area A)

Bldg 2

Floor	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
1st Floor	-	-	-	-	-	
2nd Floor	-	3	3	3	9	
3rd Floor	-	3	3	3	9	
4th Floor	-	3	3	3	9	
Total Apartments	-	9	9	9	27	Units

Bldg 3

Floor	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
1st Floor	-	-	-	-	-	
2nd Floor	2	4	4	-	10	
3rd Floor	2	4	4	-	10	
Total Apartments	4	8	8	-	20	Units

Bldg 4

Floor	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
1st Floor	-	-	-	-	-	
2nd Floor	-	4	2	3	9	
3rd Floor	-	4	2	3	9	
Total Apartments	-	8	4	6	**18**	Units

Bldg 5

Townhouse	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
Units	-	-	-	7	7	
Total Apartments	-	-	-	7	**7**	Units
Total Apartments	4	25	21	22	**72**	Units
DUE	1	16.5	21	33	71.5	

LOT #2 (Area B)

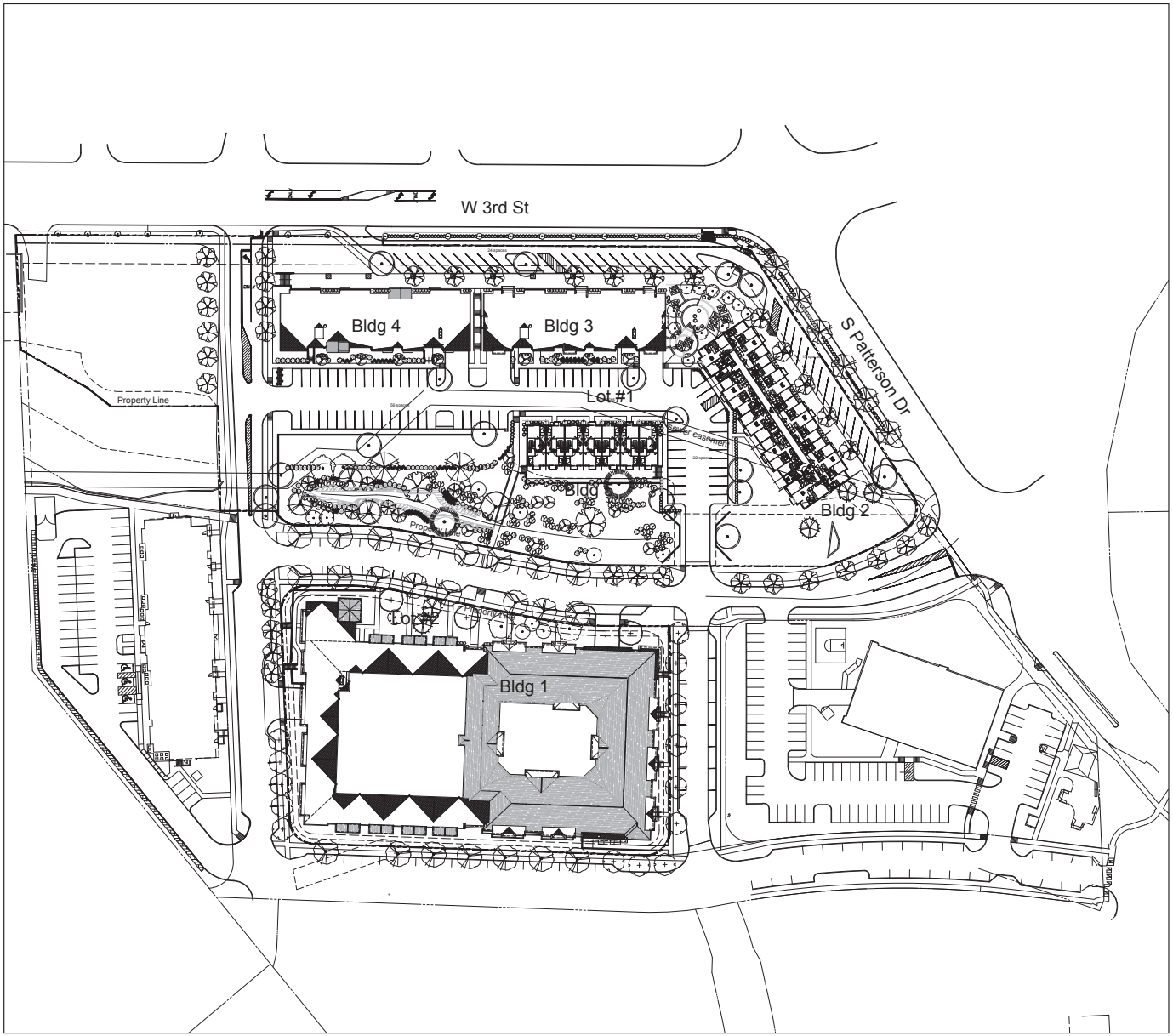
Bldg 1

Floor	S	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
1st Floor	-	2	3	2	8		
2nd Floor	2	6	4	4	10		
3rd Floor	2	6	4	5	10		
4th Floor	2	14	6	5	11		
Total Apartments	6	28	17	16	39	106	Units
DUE	1.5	7	11.22	16	58.5	94.22	
Total Apartments (Lot 1+2)	6	32	42	37	61	**178**	Units

LEVEL 5 PLAN

0 25 50 100
SCALE: 1" = 50'

N



LOT #1 (Area A)

Bldg 2

Floor	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
1st Floor	-	-	-	-	-	
2nd Floor	-	3	3	3	9	
3rd Floor	-	3	3	3	9	
4th Floor	-	3	3	3	9	
Total Apartments	-	9	9	9	27	Units

Bldg 3

Floor	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
1st Floor	-	-	-	-	-	
2nd Floor	2	4	4	-	10	
3rd Floor	2	4	4	-	10	
Total Apartments	4	8	8	-	20	Units

Bldg 4

Floor	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
1st Floor	-	-	-	-	-	
2nd Floor	-	4	2	3	9	
3rd Floor	-	4	2	3	9	
Total Apartments	-	8	4	6	**18**	Units

Bldg 5

Townhouse	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
Units	-	-	-	7	7	
Total Apartments	-	-	-	7	**7**	Units
Total Apartments	4	25	21	22	**72**	Units
DUE	1	16.5	21	33	71.5	

LOT #2 (Area B)

Bldg 1

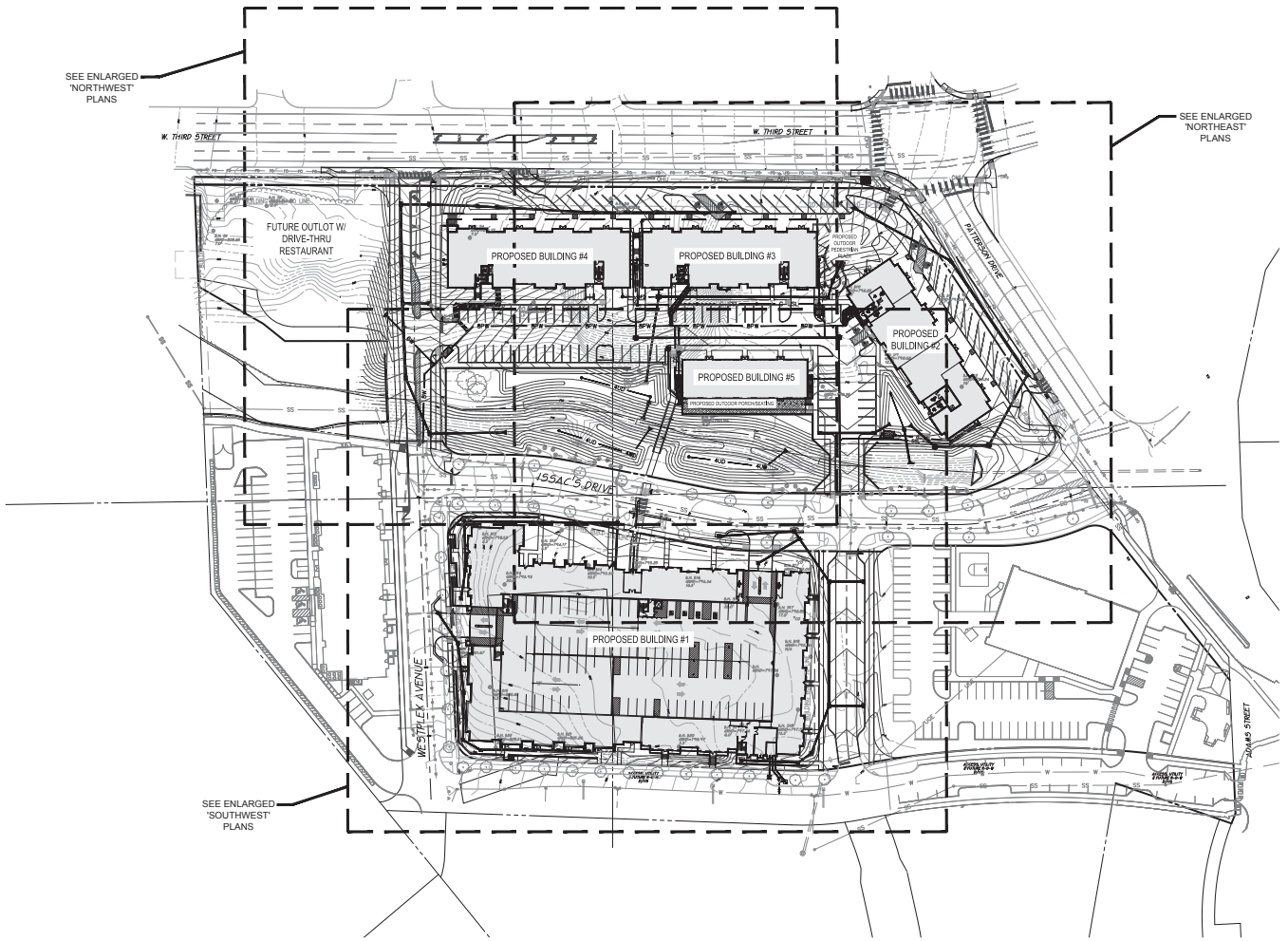
Floor	S	1 B.R.	2 B.R.	3 B.R.	4 B.R.	Totals	
1st Floor	-	2	3	2	8		
2nd Floor	2	6	4	4	10		
3rd Floor	2	6	4	5	10		
4th Floor	2	14	6	5	11		
Total Apartments	6	28	17	16	39	106	Units
DUE	1.5	7	11.22	16	58.5	94.22	
Total Apartments (Lot 1+2)	6	32	42	37	61	**178**	Units

LEVEL 5 PLAN

0 25 50 100

SCALE: 1" = 50'

N



NOTE TO CONTRACTOR

CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS & DEPTHS AND NOTIFY ENGINEER OF ANY INACCURACIES IN LOCATION OR ELEVATION OR ANY CONFLICTS PRIOR TO & AFTER ANY EXCAVATION. NO PAYMENT SHALL BE MADE TO CONTRACTOR FOR UTILITY DESTRUCTION OR UNDERGROUND CHANGES REQUIRED DUE TO CONFLICTING ELEVATIONS.

SCALE: 1"=50'

OWNER

CSO Architects
ARCHITECTURE
CIVIL ENGINEERING
PLANNING
bloomington, indiana
(812) 339-2960 (Fax)
BYNUM FANYO & ASSOCIATES, P.C.
528 north walnut street
(812) 332-8030

PROJECT:
Patterson Pointe
Bloomington, Indiana

SCOPE DRAWINGS:

REVISIONS:

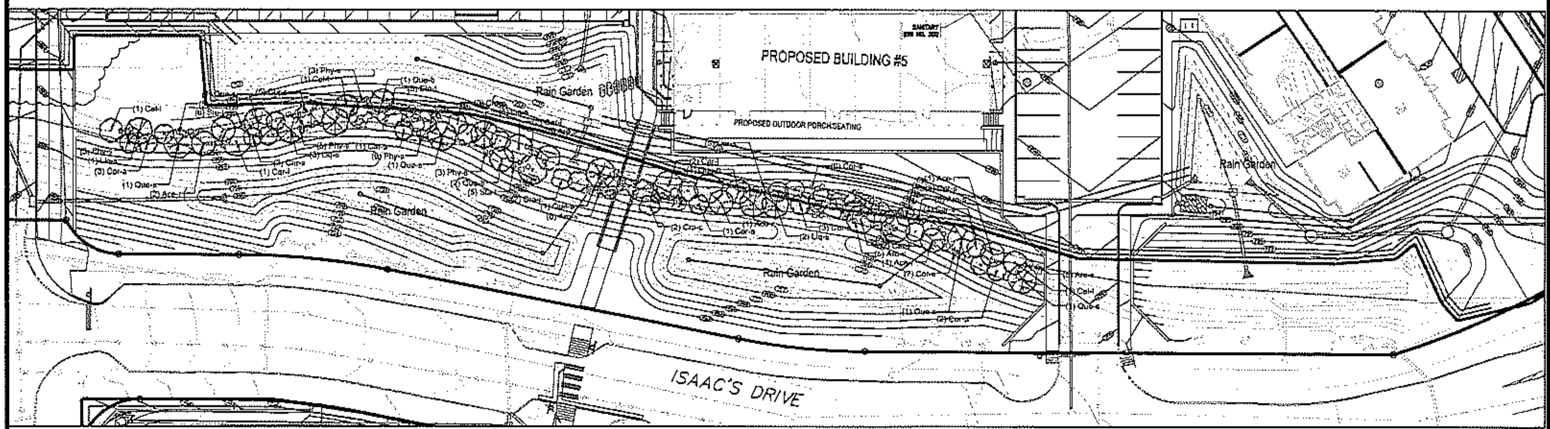
ISSUE DATE	DRAWN BY	CHECKED BY
xx/xx/2016	DJB	JSF

DRAWING TITLE:
OVERALL SITE IMPROVEMENT PLAN

CERTIFIED BY:

DRAWING NUMBER
C301

PROJECT NUMBER
401645



CREEK RESTORATION -STREAMSIDE ZONE PLANTINGS

North Scale 1" = 20'-0"

GENERAL LANDSCAPE AND PLANTING NOTES

1. Refer to Project Manual for Planting Specifications and Topsoil requirements. Refer to Plant Schedule and Planting Details for additional information.
2. All materials are subject to the approval of the Landscape Architect and Owner at any time. Landscape Architect to inspect all plant locations and plant bed conditions prior to installation. On-site adjustments may be required.
3. Rootballs shall meet or exceed size standards as set forth in "American Standards for Nursery Stock". MAIN LEADERS OF ALL TREES SHALL REMAIN INTACT.
4. Remove from the site any plant material that turns brown or defoliates within five (5) days after planting. Replace immediately with approved, specified material.
5. Plant counts indicated on drawings are for Landscape Architect's use only. Contractor shall make own plant quantity takeoffs using drawings, specifications, and plant schedule requirements (i.e., spacing), unless otherwise directed by Landscape Architect. Contractor to verify bed measurements and install appropriate quantities as governed by plant spacing per schedule. Plant material quantities shown on plan are minimum quantities. Additional material may be needed to meet spacing requirements and field conditions.
6. Seed all areas disturbed by construction activities that are not otherwise noted to receive pavement, planting bed, or sod treatment.
7. The Contractor shall install and/or amend topsoil in all proposed bed areas to meet Specifications. Contractor shall coordinate quantity and placement of topsoil. Landscaper shall verify depth of topsoil prior to plant installation. (Refer to specifications for topsoil source and placement requirements)
8. All tree locations shall be marked with 2x2" stakes prior to planting for review and approval by the Landscape Architect. Any plant material installed at an incorrect location, by the judgment of the Landscape Architect, shall be reinstalled at the Contractor's expense
9. All plant beds shall receive 3" minimum of shredded hardwood bark mulch (unless otherwise noted).
10. Verify all utility locations in the field prior to beginning work. Repair all damaged utilities to Owner's satisfaction at no additional cost.
11. The Contractor shall maintain all plant material and lawns until the project is fully accepted by the Landscape Architect, unless otherwise noted.
12. All workmanship and materials shall be guaranteed by the Contractor for a period of one calendar year after Final Acceptance.
13. Install all plant material in accordance with all local codes and ordinances. Coordinate with the Owner to obtain any required permits necessary to complete work.
14. Contractor shall test all tree pits for drainage. Any tree pit that holds water for more than 24 hours shall be installed using tree pit drainage.
15. Tree Protection Fencing is the responsibility of the Contractor. Minimum protected area shall include the full drip line of the canopy. NO construction activities, material storage, etc. may occur within that area. The Contractor shall ensure that no soil compaction or tree damage occurs in any Protected areas, at any time during the construction process.
16. Trees shall be matched in groups unless otherwise noted.

STREAMSIDE ZONE
INTERMEDIATE ZONE
FRINGE ZONE
RAINGARDENS
POOL BERM AREA
LAWN

REFER TO MAINTENANCE MANUAL, APPENDIX D

STREAMSIDE ZONE PLANTINGS

PLANT SCHEDULE

LARGE CANOPY TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	REMARKS
Car-l	7	Carya laciniosa	Shellbark Hickory	3 Gal.		
Liq-s	7	Liquidambar styraciflua	American Sweet Gum	3 Gal.		full, strong central leader, matched
Que-s	6	Quercus shumardii	Shumard Red Oak	3 Gal.		spring dug, full, strong central leader, matched
MEDIUM CANOPY TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	REMARKS
Ace-r	5	Acer rubrum	Armstrong Red Maple	3 Gal.		full, strong central leader, matched
Cel-l	3	Celtis laevigata	Sugar Hackberry	3 Gal.		
Que-b	4	Quercus bicolor	Swamp White Oak	3 Gal.		spring dug, full, strong central leader, matched
SMALL CANOPY TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	REMARKS
Car-c	8	Carpinus caroliniana	American Hornbeam	3 Gal.		full, strong central leader, matched
Cor-a	9	Cornus alternifolia	Pagoda Dogwood	3 Gal		full, strong central leader, matched
Cra-c	7	Crataegus crus-galli inermis	Thornless Cockspur Hawthorn	3 Gal.		full, strong central leader, matched
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	HEIGHT	REMARKS
Aro-s	27	Aronia melanocarpa	Autumn Magic Black Chokeberry	container	#1	
Cor-s	28	Cornus racemosa	Gray Dogwood	container	#1	

CSO Architects

context DESIGN

PROJECT: Patterson Pointe, Bloomington, Indiana

SCOPE DRAWINGS

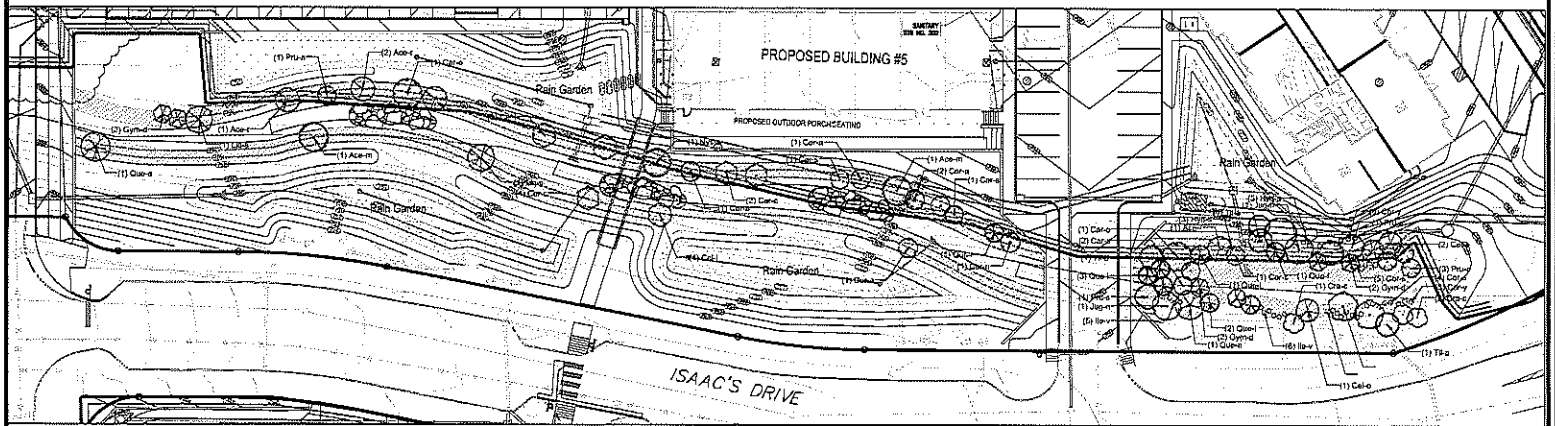
REVISIONS:

DRAWING TITLE: CREEK RESTORATION PLAN Streamside Zone

CERTIFIED BY:

DRAWING NUMBER L101

PROJECT NUMBER 18078



CREEK RESTORATION - INTERMEDIATE ZONE PLANTINGS

North 0 10' 20' 40' Scale 1" = 20'-0"

INTERMEDIATE ZONE PLANTS

PLANT SCHEDULE

LARGE CANOPY TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	REMARKS
Ace-m	2	Acer saccharum	Legacy Sugar Maple	3 Gal		full, strong central leader, matched
Car-o	2	Carya ovata	Shagbark Hickory	3 Gal.		
Jug-n	2	Juglans nigra	Black Walnut	3 Gal.		
Liq-s	2	Liquidambar styraciflua	American Sweet Gum	3 Gal.		full, strong central leader, matched
Lir-t	2	Liriodendron tulipifera	Tulip Tree	3 Gal.		full, strong central leader, matched
Nys-s	1	Nyssa sylvatica	Sour Gum	3 Gal.		full, strong central leader, matched
Que-a	2	Quercus alba	White Oak	3 Gal.		spring dug, full, strong central leader, matched

MEDIUM CANOPY TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	REMARKS
Ace-r	4	Acer rubrum	Armstrong Red Maple	3 Gal.		full, strong central leader, matched
Car-c	3	Carya cordiformis	Bitternut Hickory	3 Gal.		
Cel-l	3	Celtis laevigata	Sugar Hackberry	3 Gal.		
Cel-o	3	Celtis occidentalis	Common Hackberry	3 Gal.		full, strong central leader, matched
Pru-s	3	Prunus serotina	Wild Black Cherry	3 Gal.		
Til-a	3	Tilia americana	American Linden	3 Gal.		

SMALL CANOPY TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	REMARKS
Car-c	5	Carpinus caroliniana	American Hornbeam	3 Gal.		full, strong central leader, matched
Cor-a	8	Cornus alternifolia	Pagoda Dogwood	3 Gal.		full, strong central leader, matched
Cra-c	3	Crataegus crus-galli inermis	Thornless Cockspur Hawthorn	3 Gal.		full, strong central leader, matched
Gym-d	6	Gymnocladus dioica	Kentucky Coffee Tree	3 Gal.		full, strong central leader, matched
Pru-a	4	Prunus americana	American Plum	3 Gal.		
Que-i	8	Quercus imbricaria	Shingle Oak	3 Gal.		spring dug, full, strong central leader, matched

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	HEIGHT	REMARKS
Aro-a	27	Aronia melanocarpa	Autumn Magic Black Chokeberry	container	#1	
Cor-r	37	Cornus racemosa	Gray Dogwood	container	#1	
Cor-y	17	Corylus americana	American Hazelnut	container	#1	
Hyd-a	8	Hydrangea arborescens	Incrediball Hydrangea	container	#1	
Ile-v	11	Ilex verticillata	Winterberry	container	#1	
Phy-o	25	Physocarpus opulifolius	Summer Wine Ninebark	container	#1	space @ 5'-0" o.c.
Sta-t	16	Staphylea trifolia	American Bladdernut	container	#1	

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16. Trees shall be matched in groups unless otherwise noted.

- STREAMSIDE ZONE
- INTERMEDIATE ZONE
- FRINGE ZONE
- RAINGARDENS
- POOL BERM AREA
- LAWN

REFER TO MAINTENANCE MANUAL, APPENDIX D

CSO Architects
ARCHITECTURE • INTERIOR DESIGN

context DESIGN

PROJECT:
Patterson Pointe
Bloomington, Indiana

SCOPE DRAWINGS

REVISIONS:

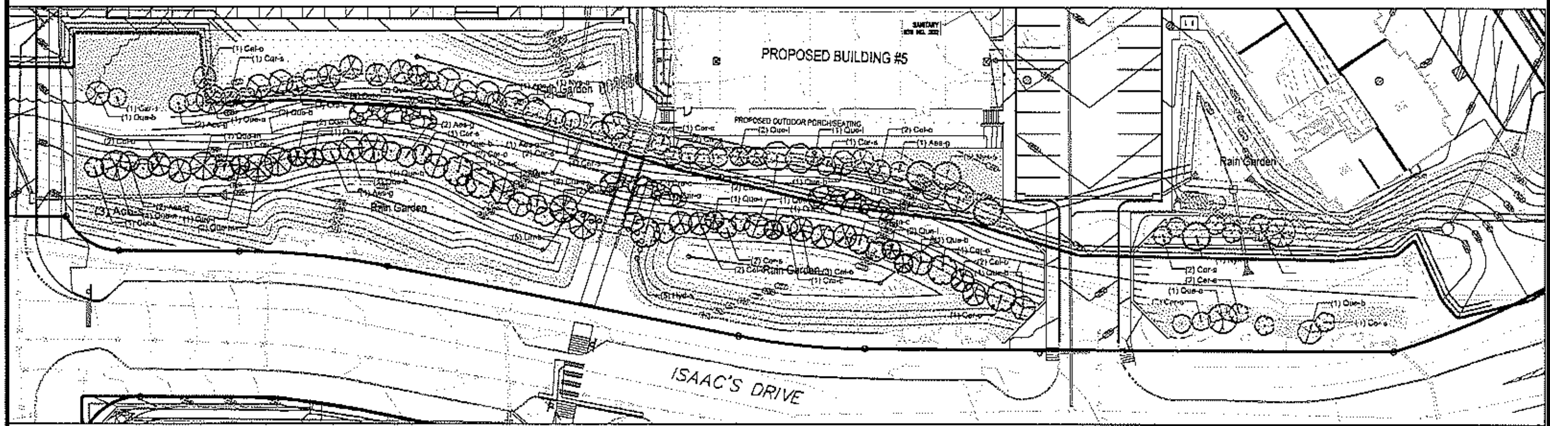
ISSUE DATE	DRAWN BY	CHECKED BY
[illegible]	JT	APP

DRAWING TITLE:
CREEK RESTORATION PLAN Intermediate Zone

CERTIFIED BY:
ALYSSA F. PRAZEAU REGISTERED No. 2002-132 STATE OF INDIANA LANDSCAPE ARCHITECT
EXPIRES 12/31/2017

DRAWING NUMBER
L102

PROJECT NUMBER
16076



CREEK RESTORATION -FRINGE ZONE PLANTINGS

FRINGE ZONE PLANTINGS

PLANT SCHEDULE

LARGE CANOPY TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	REMARKS
Car-l	5	Carya laciniosa	Shellbark Hickory	3 Gal.		
Car-o	5	Carya ovata	Shagbark Hickory	3 Gal.		
Nys-a	5	Nyssa sylvatica	Sour Gum	3 Gal.		full, strong central leader, matched
Que-a	5	Quercus alba	White Oak	3 Gal.		spring dug, full, strong central leader, matched
Que-m	5	Quercus macrocarpa	Burr Oak	3 Gal.		spring dug, full, strong central leader, matched
MEDIUM CANOPY TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	REMARKS
Cel-o	16	Celtis occidentalis	Common Hackberry	3 Gal.		full, strong central leader, matched
Que-b	15	Quercus bicolor	Swamp White Oak	3 Gal.		spring dug, full, strong central leader, matched
SMALL CANOPY TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	REMARKS
Aes-g	12	Aesculus glabra	Ohio Buckeye	3 Gal.		
Car-s	12	Carpinus caroliniana	American Hornbeam	3 Gal.		full, strong central leader, matched
Cer-s	12	Cercis canadensis	Eastern Redbud	3 Gal.		multi-trunk, matched
Cra-c	12	Crataegus crus-galli inermis	Thornless Cockspur Hawthorn	3 Gal.		full, strong central leader, matched
Que-i	12	Quercus imbricaria	Shingle Oak	3 Gal.		spring dug, full, strong central leader, matched
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	HEIGHT	REMARKS
Cor-y	5	Corylus americana	American Hazelnut	container	#1	
Hyd-s	5	Hydrangea arborescens	Incrediball Hydrangea	container	#1	
Lin-b	5	Lindera benzoin	Spicebush	container	#1	

GENERAL LANDSCAPE AND PLANTING NOTES

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16. Trees shall be matched in groups unless otherwise noted.

STREAMSIDE ZONE
INTERMEDIATE ZONE
FRINGE ZONE
RAINGARDENS
POOL BERM AREA
LAWN

REFER TO MAINTENANCE MANUAL, APPENDIX D

CSO Architects
ARCHITECTURE • INTERIOR DESIGN

context DESIGN

PROJECT:
Patterson Pointe
Bloomington, Indiana

SCOPE DRAWINGS:

REVISIONS:

DRAWING TITLE:
CREEK RESTORATION PLAN Fringe Zone

CERTIFIED BY:
ALYSSA P. PRAZEAU
REGISTERED
No. 2002-132
STATE OF INDIANA
LANDSCAPE ARCHITECT
EXPIRES 12/31/2017

DRAWING NUMBER
L103

PROJECT NUMBER
15076

ORDINANCE REQUIREMENTS
Zoning: CA

Green Factor Calculation
Requirement: 30% greenspace
Overall 315,703 s.f.
Lot 1: 222,308 s.f.
Lot 2: 93,465 s.f.
Required
Overall: 94,728 s.f.
Lot 1: 60,692 s.f.
Lot 2. 28,046 s.f.
Provided
Overall: 94,736 s.f.
Lot 1: 66,602 s.f.
Lot 2: 24,289 s.f.

Interior Planting Requirements
Lot 1 0.35 Acres
Trees: 9 canopy trees/acres
Required. 3.2
Provided: 4
3 evergreen trees/acre
Required: 1.05
Provided: 2
3 medium/small canopy trees/acre
Required: 1.05
Provided: 2
Shrubs: 27 Shrubs/acre
Required: 9.5
Provided: 12

Lot 2 0.41 Acres
Trees: 9 canopy trees/acres
Required: 3.7
Provided: 4
3 evergreen trees/acre
Required: 1.2
Provided: 2
3 medium/small canopy trees/acre
Required: 1.2
Provided: 4
Shrubs: 27 Shrubs/acre
Required: 11.1
Provided: 8

Street Tree Requirements
3rd Street 500 l.f.
Trees: 1 tree/40 l.f.
Required: 13
Provided: 13
Patterson Drive 317 l.f.
Trees: 1 tree/40 l.f.
Required: 8
Provided: 8
Miller Street existing trees to remain
Westplex Avenue (Lot 1 section) 275 l.f.
Trees: 1 tree/40 l.f.
Required: 14 (2 sides)
Provided: 15 (2 sides)
Westplex Avenue (Lot 2 section) Existing trees to remain
Isaac's Drive Existing trees to remain
Dolleah Avenue 253 l.f.
Trees: 1 tree/40 l.f.
Required: 12 (2 sides)
Provided: 8 (2 sides)

Buffer Requirements:
Site Zone: CA
Adjacent Zone: CG
No buffers required between these two uses

Parking Perimeter Requirements
Parking Edge 1: 24 spaces
Trees: 1 tree/4 spaces
Required: 6
Provided: 7
Shrubs: 3 shrubs/space
Required: 72
Provided: 90

Parking Edge 2: 15 spaces
Trees: 1 tree/4 spaces
Required: 4
Provided: 6
Shrubs: 3 shrubs/space
Required: 45
Provided: 51

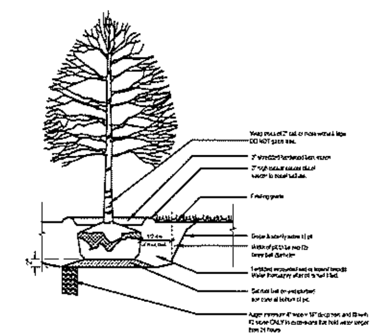
Parking Edge 3: 16 spaces
Trees: 1 tree/4 spaces
Required. 4
Provided. 4
Shrubs: 3 shrubs/space
Required: 48
Provided: 40
Parking Edge 4: 20 spaces
Trees: 1 tree/4 spaces
Required: 5
Provided: 5
Shrubs: 3 shrubs/space
Required: 60
Provided: 64
Parking Edge 5: 12 spaces
Trees: 1 tree/4 spaces
Required: 3
Provided: 3
Shrubs: 3 shrubs/space
Required: 36
Provided: 50
Parking Edge 6: 5 spaces
Trees: 1 tree/4 spaces
Required: 1
Provided: 1
Shrubs, 3 shrubs/space
Required: 15
Provided: 15
Parking Edge 7: 9 spaces
Trees: 1 tree/4 spaces
Required: 2
Provided: 2
Shrubs: 3 shrubs/space
Required: 27
Provided: 31
Parking Edge 8: 8 spaces
Trees: 1 tree/4 spaces
Required: 2
Provided: 2
Shrubs: 3 shrubs/space
Required: 24
Provided: 24
Parking Interior Requirements
Islands: 1/10 spaces
Lot 1 Spaces: 71 spaces
Required: 5.0
Provided: 5
No uncovered parking on lot 2

Vacant Lot over 1/2 acre 375 l.f. (2 edges)
1 evergreen shrub/3 l.f. along outer edge
Required. 125
Provided 119*
*One of two access drives has a mid blocked by hedgerow

PLANT SCHEDULE						
TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	REMARKS
Ace-r	8	Acer rubrum 'Armstrong'	Armstrong Red Maple	B & B	2"Cal	full, strong central leader, matched
Ace-s	13	Acer saccharum 'Legacy'	Legacy Sugar Maple	B & B	2"Cal	full, strong central leader, matched
Gle-p	9	Gleditsia triacanthos inermis 'Shademaster'	Shademaster Thornless Honeylocust	B & B	2"Cal	full, strong central leader, matched
Lir-t	4	Liriodendron tulipifera	Tulip Tree	B & B	2"Cal	full, strong central leader, matched
Nys-s	3	Nyssa sylvatica	Sour Gum	B & B	2"Cal	full, strong central leader, matched
Que-r	4	Quercus rubra	Red Oak	B & B	2"Cal	spring dug, full, strong central leader, matched
Til-c	8	Tilia cordata 'Greenspire'	Greenspire Littleleaf Linden	B & B	2"Cal	full, strong central leader, matched
Ulm-m	10	Ulmus x 'Morton Accolade'	Morton Accolade Elm	B & B	2"Cal	full, strong central leader, matched
Zel-v	13	Zelkova serrata 'Village Green'	Village Green Sawleaf Zelkova	B & B	2"Cal	full, strong central leader, matched
EVERGREEN TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	REMARKS
Tsu-c	4	Tsuga canadensis	Canadian Hemlock	B & B	min. 6' ht.	full, strong central leader, matched, symmetrical
SMALL CANOPY TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	REMARKS
Ame-c	3	Amelanchier laevis 'Cumulus'	Cumulus Allegheny Serviceberry	B & B	6' ht.	multi-trunk, matched
Car-c2	8	Carpinus caroliniana	American Hornbeam	B & B	2"Cal	full, strong central leader, matched
Cer-c	2	Cercis canadensis	Eastern Redbud	B & B	6' ht.	multi-trunk, matched
Mal-x	14	Malus x 'Adirondack'	Adirondack Crabapple	15 gal		12' tall x 6' wide to avoid overhead wire conflicts
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	HEIGHT	REMARKS
Aro-a	47	Aronia arbutifolia 'Brilliantissima'	Brilliant Red Chokeberry	container	24"	space @ 3'-0" o.c.
Hyd-a	8	Hydrangea arborescens 'Abetwo'	Incrediball Hydrangea	container	24"	space @ 5'-0" o.c.
Hyd-w	109	Hydrangea quercifolia 'Pee Wee'	Pee Wee Oakleaf Hydrangea	container	24"	space @ 3'-0" o.c.
Ile-g	48	Ilex glabra 'Shamrock'	Shamrock Inkberry	container	24"	space @ 3'-0" o.c., allow to mass
Ile-p	17	Ilex verticillata 'Mr. Poppins'	Mr. Poppins Winterberry	container	24"	space @ 3'-0" o.c.
Ite-v	22	Itea virginica 'Henry's Garnet'	Henry's Garnet Sweetspire	container	24"	space @ 3'-0" o.c.
Jun-c	71	Juniperus chinensis 'Sea Green'	'Sea Green' Juniper	container	24"	space @ 3'-0" o.c., allow to mass
Jun-v	174	Juniperus virginiana 'Grey Owl'	Grey Owl Juniper	container	18" spread	space @ 3'-0" o.c., allow to mass
Phy-o	42	Physocarpus opulifolius 'Summer Wine'	Summer Wine Ninebark	container	24"	space @ 6'-0" o.c.
Pot-f	36	Potentilla fruticosa 'Goldfinger'	Goldfinger Potentilla	container	24"	space @ 3'-0" o.c.
Rhu-a	52	Rhus aromatica 'Gro-Low'	Gro-Low Fragrant Sumac	container	18" spread	space @ 4'-0" o.c., allow to mass
Vib-d	19	Viburnum dentatum 'Christom'	Blue Muffin Viburnum	container	24"	space @ 4'-0" o.c.
GRASSES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	HEIGHT	REMARKS
Pan-v	92	Panicum virgatum 'Cloud Nine'	Cloud Nine Switch Grass	#1 pot		space @ 3'-0" o.c.

STREAMSIDE ZONE
INTERMEDIATE ZONE
FRINGE ZONE
RAINGARDENS
POOL BERM AREA
LAWN

REFER TO MAINTENANCE MANUAL, APPENDIX D



TREE PLANTING
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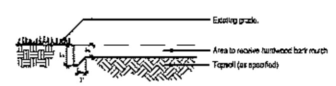

SPADE EDGE
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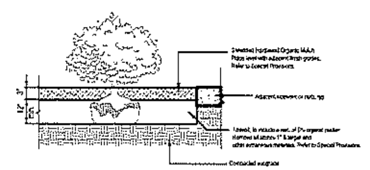

LANDSCAPE BED PREPARATION
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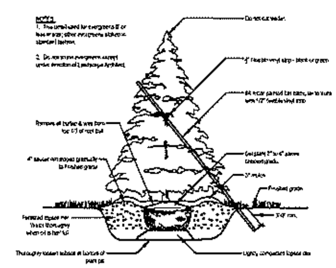
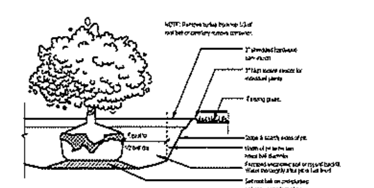


EVERGREEN TREE PLANTING
Not to Scale



SHRUB PLANTING
Not to Scale

CSO Architects
ARCHITECTURE • INTERIOR DESIGN

context
DESIGN

PROJECT:
Patterson Pointe
Bloomington, Indiana

SCOPE DRAWINGS:

REVISIONS

DRAWING TITLE
PLANTING DETAILS

CERTIFIED BY:
ALYSSA P. PRAZEAU
No. 2002-132
STATE OF INDIANA
LANDSCAPE ARCHITECT
EXPIRES 12/31/2017

DRAWING NUMBER
L110

PROJECT NUMBER
18076

STORM WATER FACILITIES AND MAINTENANCE MANUAL
for
STORM WATER QUALITY AND STREAM RESTORATION AREA
at
PATTERSON POINTE

Owner: Patterson Pointe LLC
5005 North SR 37 Business
Bloomington, IN 47408
317.919.2020
Contact: Mark Figg

Approved Manual Prepared by: Smith Neubecker & Associates, Inc.
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Manual Amended by: Context, LLC
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Bloomington, IN 47404
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Contact: Jeff Fanyo

PROJECT DESCRIPTION

The Patterson Pointe PUD will include restoration of a natural stream channel as part of the site development project. The stream will be developed by removing an existing 36" RCP storm culvert that bisects the northern portion of the site and creation of natural over bank areas in a park-like setting. This area will provide water quality enhancement for the existing degraded channel, as well as enhancement for storm water runoff from the development site. Rain garden areas will also be located within the area to reduce the number of point source discharges to the new channel.

STREAM CHANNEL RESTORATION BMP

The location of the restoration area is shown on Exhibit A. There are several key components of the stream restoration plan:

- Channel Area
- Streamside zone
- Intermediate Zone
- Fringe Zone
- Raingardens
- Pool Berm
- Plunge Pool
- Weeper Pipe

Exhibit B shows a typical cross section through the channel and raingardens.

Storm water runoff flowing into the site from the existing degraded stream will follow the newly created meandering channel across the site from west to east. The channel will become encapsulated at the eastern edge of the site where it flows back into the existing 36" RCP. Two Pool Berms and an associated riffle will be created in the middle of the channel. The berms will cause ponding of water during low flows, which provide for habitat, as well as extended detention for settlement of suspended particles.

Storm water runoff from development project areas south of the restoration area will be collected in a storm sewer system, which utilizes a weeper pipe to evenly discharge storm water runoff over the area south of the channel. Runoff will then sheet flow through the selected plant materials in the intermediate zone, fringe zone, and streamside zone before entering the stream channel. Native plants for each zone have been selected for the benefits they provide for water quality enhancement, as well as to replicate a natural floodplain area. Exhibit D lists the plant material located in each zone.

RAIN GARDEN POST CONSTRUCTION BMP

There are two rain garden features located north of the channel and two rain garden features located on the south side of the channel. These locations are shown on Exhibit A. Rain gardens have been located at storm sewer pipe discharge locations to limit the number of point source discharge locations to the stream channel. Each rain garden will consist of a Plunge Pool at the pipe outlet location to

dissipate energy, an infiltration bed with an underdrain pipe, and an emergency overflow weir. Details of a prototypical plunge pool are shown in Exhibit C.

When storm water runoff is discharged from the storm sewer system into the rain gardens, low flow will infiltrate into the rain garden bottom, be collected by the underdrain pipe, and conveyed to the channel. Higher flows will pond up within the raingarden areas and discharge through the emergency overflow weir. Each rain garden provides an extended detention time, which permits for settlement of suspended particles. Runoff that is routed through the emergency overflow weir will sheet flow through the selected plant material in the fringe zone, intermediate zone, and streamside zone before entering the stream channel. The stream channel will contain large cobblestones (6”-10”), small bounders (10”-16”) and large boulders (16”-24”). As the restored stream area plantings mature, it is anticipated that vegetation will become established along the stream bottom, helping to slow down water flow.

SOIL REPLACEMENT

In areas where pavement is to be removed for the restoration of the streambed, the following steps shall be followed:

- All pavement (concrete, asphalt, pavers, etc.) shall be removed in totality. The pavement shall be removed from the site.
- All aggregate base material shall be removed to its full depth. This product shall only be reused for new construction after being washed and tested to ensure it meets full specifications for backfill or pipes or base material under new pavement.
- All excavated areas shall be filled with soil appropriate for the proposed plantings. The soil shall be slightly tamped and wetted in 6” lifts to ensure excessive amount of settlement do not take place. The soil types shall be as follows:
    - Raingarden bottom: biosoil mix
    - Sloped area with native seed: clay sandy loam to ensure the sides compactable and the native plant material is not provided too much organic material.
    - Tree pits: Planting soil as defined by specifications

STREAM CHANNEL RESTORATION MONITORING

Stream monitoring reports must be submitted each year and continue for a minimum of three years after work installation is complete. The inspection for the report should be completed between late August and early September. The report shall include the following:

- Pictures of each level of vegetation (intermediate zone, fringe zone, and streamside zone), including areas of success and failure
- Narrative describing the activity accomplished to date
- Number of acres planted
- Number of species planted
- List of species planted on site
- Estimated survival rate (as a percentage and a count) – volunteer plants should not be included in survival counts

- Discussions of hydrology
- Plant community development at the site
- Methods and criteria used to evaluate the success of the installation
- Recommendations for corrections of areas that are failing

It is the responsibility of the Owner to prepare the annual monitoring report and to ensure success of the restoration program. These reports are to be submitted to the City of Bloomington Planning Department, as well as to the Indiana Department of Environmental Management (IDEM), as required.

At least six permanent monitoring locations shall be established to evaluate the restoration process. These locations shall quantify trees, shrubs, seed mixes, weed and erosion control and riffle structures. Within a 30-foot radius of each monitoring station, herbaceous species of trees and shrubs should be identified and used to evaluate coverage percentages. An analysis of this vegetation should be provided in the report.

The submittal for the first year shall include an as-built plan of the initial installation. Monitoring must follow the process presented in the Indiana Department of Natural Resources (IDNR) Forested habitat mitigation/restoration (FHMR) planting guidelines.

Success Criteria for Monitoring

The following species are not allowed in any quantity in the restoration area and shall be removed promptly after they have been observed:

1. Trees
    - Ailanthus altisssima (Tree-of-Heaven)
    - Acer ginnala (Amur Maple)
    - Acer platanoides (Norway maple)
    - Eleagnus angustrifolia (Russian Olive)
    - Eleagnus umbellate (Autumn Olive)
    - Morus alba (White Mulberry)
    - Pyrus calleryana (Bradford or Callery Pear)
    - Rhamnus cathartica (Buckthorn)
    - Rhamnus fragula (Glossy or Smooth Buckthorn)
    - Rhamnus fragula columnaris (Buckthorn Tallhedge)
    - Robinia cathartica (Black Locust)
    - Ulmus pumila (Siberian Elm)

2. Shrubs
    - Alnus glutinosa (Black Elder)
    - Berberis thunbergii (Japanese barberry)
    - Buddleia davidii (Butterfly Bush)
    - Celastrus scandens (Asiatic Bittersweet)
    - Euonymus alatus compactus (Burning Bush)
    - Lespedeza bicolor (Bicolor Lespedeza)

- Ligustrum vulgare (Common Privet)
- Lonicera spp. (Bush Honeysuckle)
- Rosa multiflora (Multiflora Rose)
- Spiraea japonica (Japanese Spirea)
- Toxicodendron pubescens, syn Rhus pubescens (Atlantic Poison Oak)
- Toxicodendron vernix, syn Rhus vernix (Poison Sumac)
- Viburnum opulus v. opulus (European Highbush cranberry)

3. Grasses
    - Agropyrun repens (Quackgrass)
    - Bromus inermis (Smooth Brone)
    - Elymus repens (Quake Grass)
    - Festuca arundinacea (Tall Fescue)
    - Lepidium draba (perennial Peppergrass)
    - Microstegium vimineium (Japanese Stilt Grass)
    - Miscanthus sinensis (Maiden Grass)
    - Phalaris arundinacea (Reed Canary Grass)
    - Phragmites australis (Reed Grass)
    - Sorghum almun Pariodi (Columbus Grass)
    - Sorghum bicolor (Shattercane)
    - Sorchum halapense (Johnson Grass)

4. Groundcover
    - Celastrus orbiculatus (Oriental Bittersweet)
    - Convolvulus arvensis (Field Bindweed)
    - Coronilla varia (Crown Vetch)
    - Cynanchum nigrum, syn Vincetoxicum nigrum (Black Swallow Wort)
    - Cynanchum rossicum (Pale Swallow Wort)
    - Dioscorea batatas (Potato Vine)
    - Dioscora oppositifolia (Chinese Yam)
    - Euonymus fortunei (Purple Wintercreeper)
    - Glechoma hederacea (Creeping Charlie)
    - Hedera helix (English Ivy)
    - Humulus japonicas (Japanese Hops)
    - Lonicera japonica (Japanese Honeysuckle)
    - Lonicera maackii (Amur Honeysuckle)
    - Lysimachia nummularia (Moneywort)
    - Polygonum perfoliatum (Mile a minute Weed)
    - Pueraria lobate (Kudzu)
    - Rhus radicans (Poison Ivy)
    - Sicyos angulatus (Bur Cucumber)
    - Vinca sp. (Myrtle)

5. Herbaceous plants
    - Alliums spp. (Wild Garlic and Wild Onion)
    - Alliaria petiolate (Garlic Mustard)
    - Centaurea cyanus (Cornflower)
    - Centaruea repens (Russian Knapweed)
    - Cirsium arvense (Canada Thistle)
    - Digitalis lanata (Grecian Foxglove)
    - Dipsacus fullonum ssp. Sylvestris (Teasel)
    - Fallopia japonica (Giant Hogweed)
    - Hesperis matronialis (Dame's Rocket)
    - Imula britannica (Meadow Fleabane)
    - Lespedeza cuneate (Sericea lespedeza)
    - Lythrum salicara (Purple Loosestrife)
    - Melilotus officinalis (Sweet Clover)
    - Ornithogalum umbellatum (Star of Bethleham)
    - Polygonum cuspidatum (Japanese Knotweed)
    - Sonchus arvensis (Pernnial Sowthistle)

6. Aquatic Plants
    - Egeria densa (Brazilian elodea)
    - Eichhornis crassipes (Water Hyacynth
    - Myriophyllum spicatum (Eurasian Watermilfoil)
    - Nymphoides pellata (Yellow floating heart)
    - Potamogeton crispus (Curly leaf pondweed)
    - Typha sp. (Cattails)

Native vegetation survival, including planted seed mix, trees, and shrubs, shall have an 80 percent survival rate within the restoration area. Invasive species listed above or volunteer plants shall not be counted. Bare ground areas shall not exceed 5 percent and shall be repaired promptly when observed.

STREAM RESTORATION CONTINGENCY PLAN

At the end of the first year after installation, the Owner shall replace all plant material as needed to meet the monitoring plan and success criteria requirement percentages listed above. This shall include any plant material that is found to not be true to its botanical name, is not alive, or not in good condition. Any bare ground or erosion control and associated plant cover failures must be corrected and brought into compliance with the original plan promptly after it is observed. Any invasive species listed above found within the restoration area shall be removed.

OPERATION AND MAINTENANCE

Maintenance responsibilities for the stream channel, rain gardens, plunge pool berms, and weeper pipes shall be the responsibility of the Owner. The stream channel shall be inspected on a quarterly basis and after any significant rain event until the vegetation has become established. Reseeding, mowing, or

controlled burning of the vegetative cover may be required until the material becomes established. Any such work should be performed by a contractor with experience in establishing and maintenance of native species. Preapproved companies include Cardno (formerly JF New), Spence Restoration, and Ecologic. Other companies can provide a list of 10 successful native planting and maintenance projects, or they can work directly under one of the preapproved companies. Following establishment of vegetative cover, the stream restoration area and drainage features should be inspected biannually. Accumulated sediment within the rain gardens, plunge pool, and weeper pipe should be removed and deposited off site in a legal manner. Any erosion of the stream bank, rain gardens, or plant zones shall be repaired and the area reseeded with the appropriate ground cover.

Different types of planting approaches shall require different types of maintenance.

Seeded Areas

Areas to receive seeded native vegetation, including rain gardens and parts of the fringe, intermediate, and stream side zones, shall be mown on a monthly schedule at a 10" height during the first growing season. This is to keep weed growth in check while the native seed mix becomes established. Herbicides, and fertilizers shall not be used within these areas. Sprays to target specific weed populations may be used at the appropriate times of the year and in the correct amounts to minimize runoff into the stream corridor.

The second growing season shall require a mowing in spring if more than 35% of the vegetation present is weed material. The plantings shall be mowed at 10" height. Additional mowing during the year shall depend upon the amount of weed growth. I should be anticipated that at least one more mowing shall be required.

During the third growing season, weed growth should be minimized as the native grasses and sedges become well established. The forbs should start producing flowers and seasonal color. If weed growth exceeds 20% of the planted areas, mowing shall be required once during the growing season. A second mowing shall take place either in late fall or early spring. The cuttings from this mowing shall be collected to avoid excess amounts of thatch in the planting areas.

For future growing seasons, specific weeds shall be removed manually or with appropriate amounts and types of chemical application. Chemical applications shall be used on a very limited basis.

Nursery Plantings

Nursery plantings include container plants (larger grasses and shrubs) and balled and burlapped plants. The plants shall be allowed to grow to their natural size and shape. Very limited trimming shall take place on these plants. When trimming is required, only individual limbs shall be removed using sharpened pruners, loppers and small saws. Limbs shall be removed at a crotch angle or within inches of the ground depending on the characteristics of individual plant species. Those persons performing maintenance on shrubs and trees shall be familiar with the natural form and flowering characteristics of each species to know how pruning should be completed. Trees shall only be planted when dormant. Shearing of plants and plant masses shall not be permitted within the stream restoration area.

CHANGES IN OWNERSHIP

This facility plan shall run with the land. Changes in Ownership shall result in the transfer of ownership and maintenance responsibilities. Any changes in ownership shall be documented in this Facilities Plan. It shall be the responsibility of the Seller to notify the City of Bloomington of any change in ownership of the property.

RIGHT OF ENTRY

The Owner herby gives the City of Bloomington the right of entry over an across the property to inspect the storm water basin.

STORMWATER BMP INSPECTION REPORT

General Information

Stormwater BMP Location:

Date of Inspection:

Company Name:

Street Address:

City: State: Zip Code:

Phone: Email:

Inspector Name:

Vegetative Quality

Invasive species present: Y ☐ N ☐

Species present:

Removed: Y ☐ N ☐

Methods used:

Erosion Present: Y ☐ N ☐

Locations and causes:

Structural damage: Y ☐ N ☐

Location and causes:

Outlet Clear: Y ☐ N ☐

Floatable debris: Y ☐ N ☐

Accumulated sediment: Y ☐ N ☐

Oil present: Y ☐ N ☐

Trash: Y ☐ N ☐

Additional comments/Actions to be taken (provide time frame)

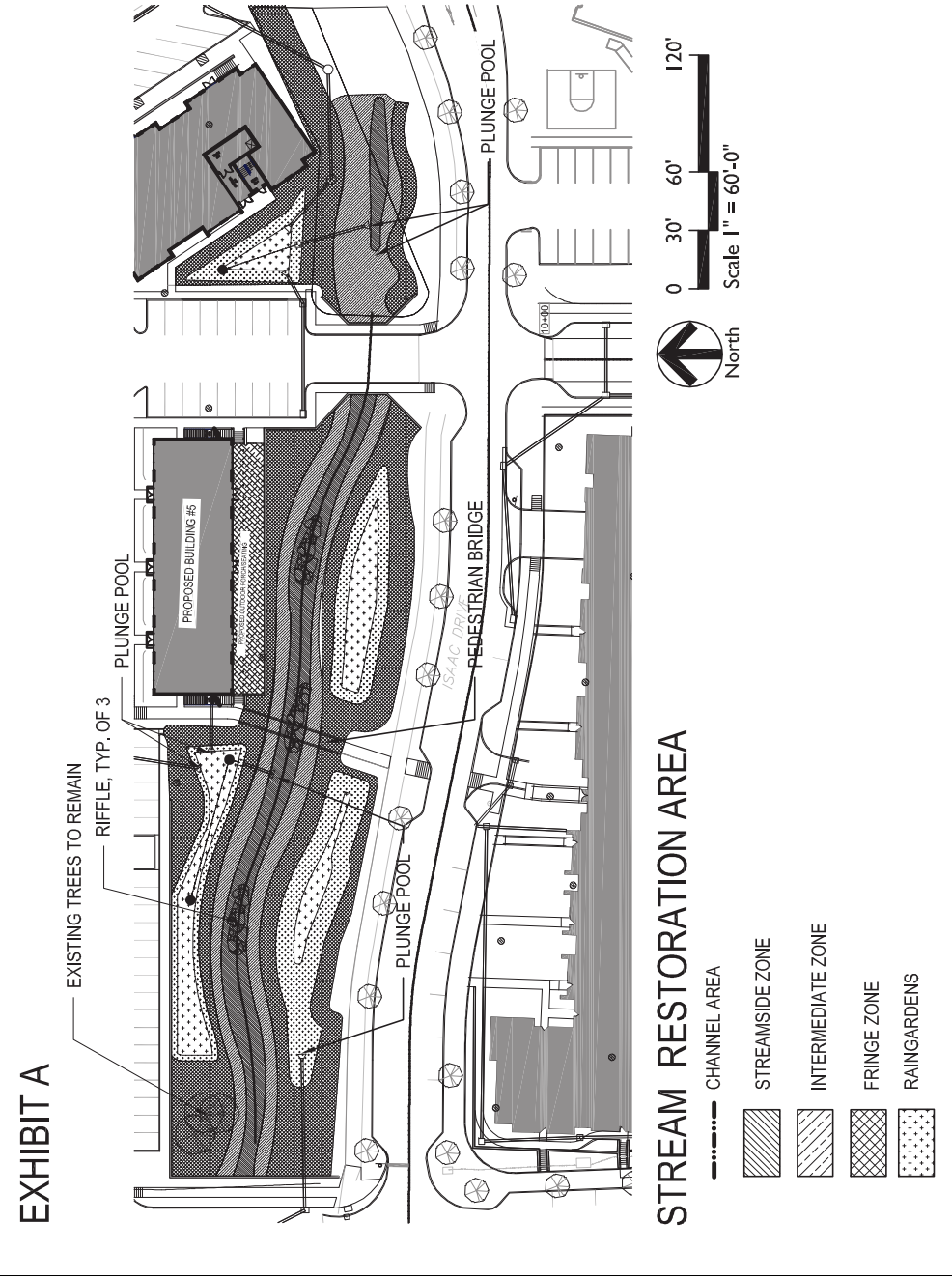
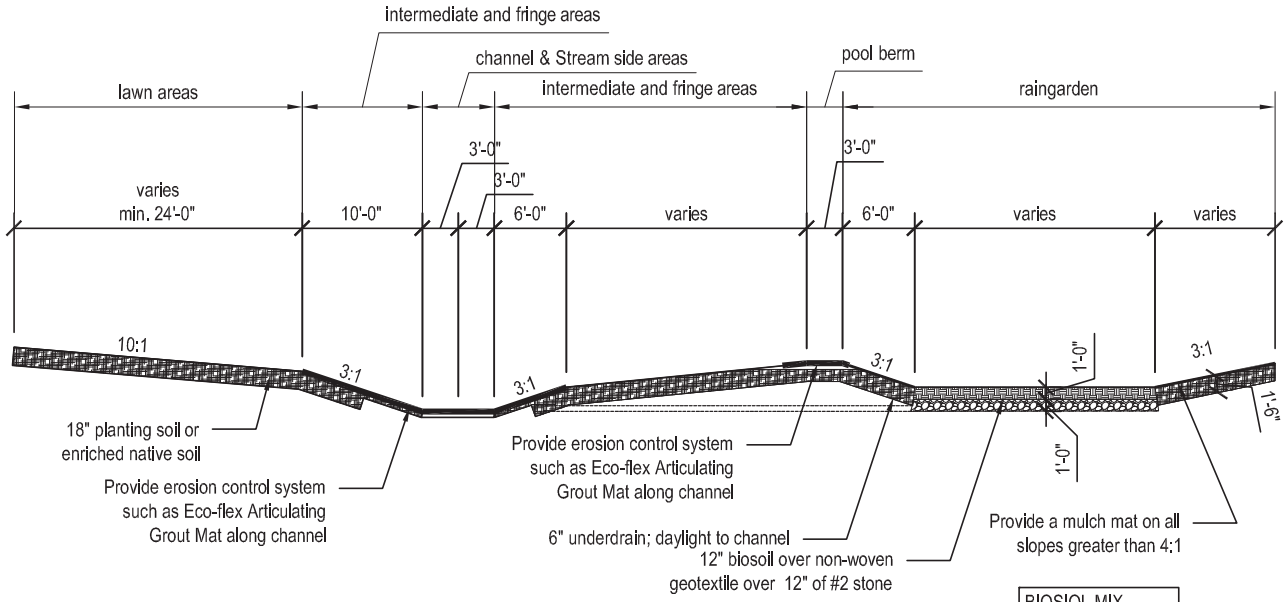
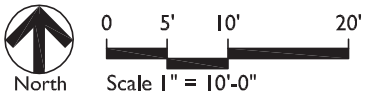


EXHIBIT B



BIOSIOL MIX
30% leaf compost
40% planting soil
30% sand

TYPICAL CHANNEL SECTION



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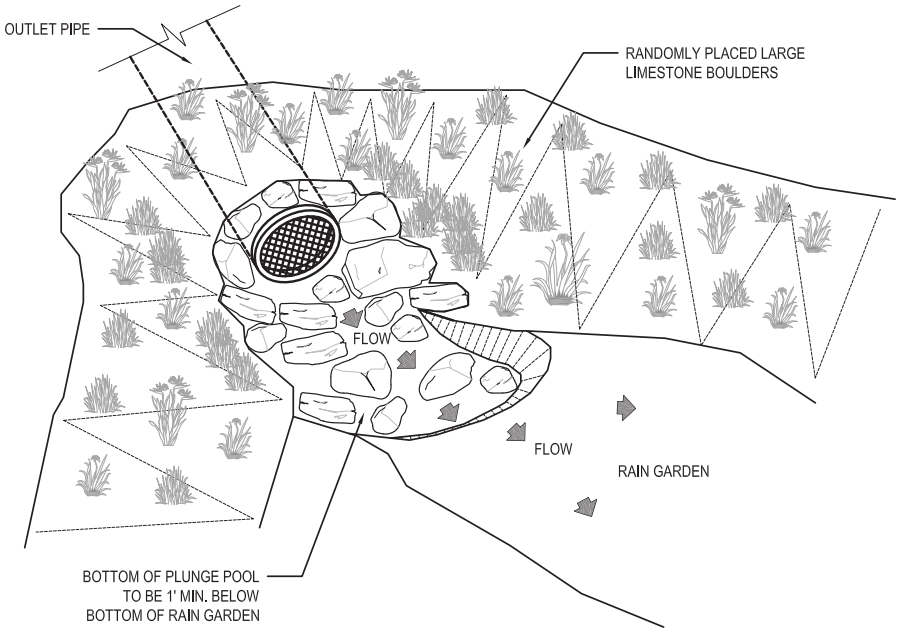
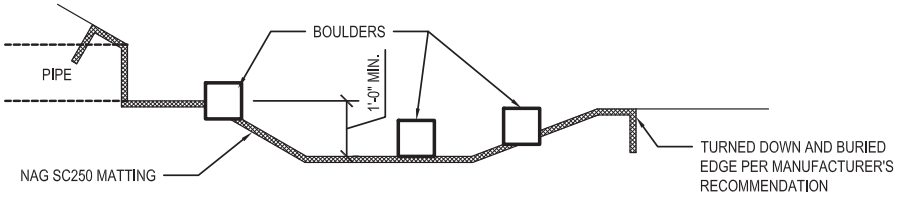




PLUNGE POOL DETAIL

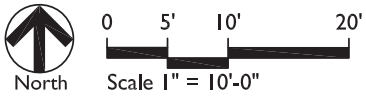


EXHIBIT D

RAINGARDEN PLANT LIST

Common Name	Latin Name	Exposure	Flower	Height	Inundation	Salt	Dought
Grasses and Sedges							
Yellow Fox Sedge	Carex annectans var xanthocarpa	Sun - Psun	May-June	1-2 ft	> 24 hours	Yes	Yes
Riverbank Tussock Sedge	Carex emoryi	Sun-Psun	May-June	2 ft	> 24 hours	Yes	Yes
Frank's Sedge	Carex frankii	Sun-Shade	May-July	1-2 ft	> 24 hours	Yes	Yes
Meadow Sedge	Carex granularis	Sun-Shade	May-June	1 ft	2-24 hours	Yes	Yes
Field Oval Sedge	Carex molesta	Sun-Psun	May-July	1-2 ft	> 24 hours	Yes	Yes
Lance-Fruited Oval Sedge	Carex scoparia	sun	May-July	1-2 ft	> 24 hours	Yes	Yes
Fox Sedge	Carex vulpinoidea	Sun-Psun	May-June	1-2 ft	> 24 hours	Yes	Yes
Tufted Hair Grass	Deschampsia caespitosa	Sun	May-June	1-2 ft	2-24 hours	Yes	Yes
Switchgrass	Panicum virgatum	Sun	July-August	3-5 ft	> 24 hours	Yes	Yes
Little Bluestem	Schizachyrium scoparium	Sun	July-August	2-3 ft	2-24 hours	Yes	Yes
Reddish Bulrush	Scirpus pendulus	Sun	June-July	3-4 ft	> 24 hours	Yes	Yes
Prairie Dropseed	Sporobolus heterolepis	Sun	August-Sept	1-2 ft	2-24 hours	Yes	Yes
Wildflowers							
New England Aster	Aster novae-angliae	Sun	Sept-October	3-4 ft	2-24 hours		Yes
Blue False Indigo	Baptisia australis	Sun-Psun	May-June	3-5 ft.	<2 hours		
Wildflowers	Echinacea purpurea	Sun-Psun	July-August	2-3 ft	<2 hours		
Hollow Joe Pye Weed	Eupatorium fistulosum	Sun	August-Sept	5-8 feet	2-24 hours		
Blue Flag	Iris virginica shrevei	sun-shade	May-June	1-2 feet	>24 hours		
Prairie Blazing Star	Liatris pycnostachya	Sun	July-August	3-5 ft	2-24 hours		Yes
Great Blue Lobelia	Lobelia siphilitica	Sun-shade	August-Sept	2-3 ft	2-24 hours		
Smooth Penstemon	Penstemon calycosus	Sun-shade	May-June	2-3 feet	2-24 hours		
Obedient Plant	Physostegia virginiana	Sun	August-Sept	2-3 ft	2-24 hours	Yes	Yes
Mountain Mint	Pycnanthemum virginianum	Sun	July-August	1-2 ft	2-24 hours		Yes
Sweet Black-Eyed Susan	Rudbeckia subtomentosa	Sun-Psun	August-Sept	3-4 ft	> 24 hours	Yes	Yes
Riddell's Goldenrod	Solidago riddellii	Sun	Sept-October	2-3 ft	2-24 hours	Yes	Yes
Smooth Ironweed	Vernonia fasciculata	Sun	August-Sept	3-4 ft	> 24 hours		Yes
Golden Zizia	Zizia aurea	Sun-shade	May-June	1-2 feet	2-24 hours		

FRINGE ZONE SEED MIX

Common Name	Latin Name	Seed Rate Ounces/Acre
Large Trees		
Shellbark Hickory	Carya laciniosa	
Shagbark Hickory	Carya ovata	
Black Gum	Nyssa sylvatica	
White Oak	Quercus alba	
Bur Oak	Quercus macrocarpa	
Medium Trees		
Hackberry	Celtis occidentalis	
Swamp White Oak	Quercus bicolor	
Small Trees		
Ohio Buckeye	Aesculus glabra	
Ironwood	Carpinus caroliniana	
Redbud	Cercis canadensis	
Cockspur Hawthorn	Crataegus crus-galli	
Shingle Oak	Quercus imbricata	
Shrubs		
American Filbert	Corylus americana	
Smooth Hydrangea	Hydrangea arborescens	
Common Spicebush	Lindera benzoin	
Grasses and Sedges		
Big Bluestem	Andropogon gerardii	16
Canada Wild Rye	Elymus canadensis	32
Verginia Wild Rye	Elymus virginicus	12
Switchgrass	Panicum virgatum	4
Little Bluestem	Schizachyrium scoparium	32
Indian Grass	Sorghastrum nutans	16
Forbs		**112**
Smooth Aster	Aster laevis	1
New England Aster	Aster novae-angliae	1
White False Indigo	Baptisia leucantha	2
Wild Senna	Cassia hebecarpa	2
Tall Coreopsis	Coriopsis tripteris	2
Purple Coneflower	Echinacea purpurea	4
Rattlesnake Master	Eryngium yuccafolium	3
Sawtooth Sunflower	Helianthus grosseserratus	1
Western Sunflower	Helianthous occidentalis	1
Showy Sunflower	Heliantus rigidus	1
False Sunflower	Heliopsis helianthoides	3
Prairie Blazing Star	Liatirs pycnostachya	1
Bergamot	Mondarda fistulosa	0.5

Foxglove Beardtongue	Penstemon digitalis	0.5
Purple Prairie Clover	Petalostemum purpureum	1
Prairie Cinqufoil	Potentilla arguta	1
Mountain Mint	Pycnanthemum virginianum	0.5
Yellow Coneflower	Ratibida pinnata	4
Black Eyed Susan	Rudbeckia herta	4
Sweet Black-Eyed Susan	Rudbeckia subtoementosa	3
Rosinweed	Silphium integrifolium	2
Compass Plant	Silphium laceniatum	2
Prairie Dock	Silphium terebinthinaceum	2
Stiff Goldenrod	Solidago rigida	2
Riddell's Goldenrod	Solidago riddellii	1
Tall Ironweed	Vernonia altissima	2
Culver's Root	Veronicastrum virginicum	0.5
		48

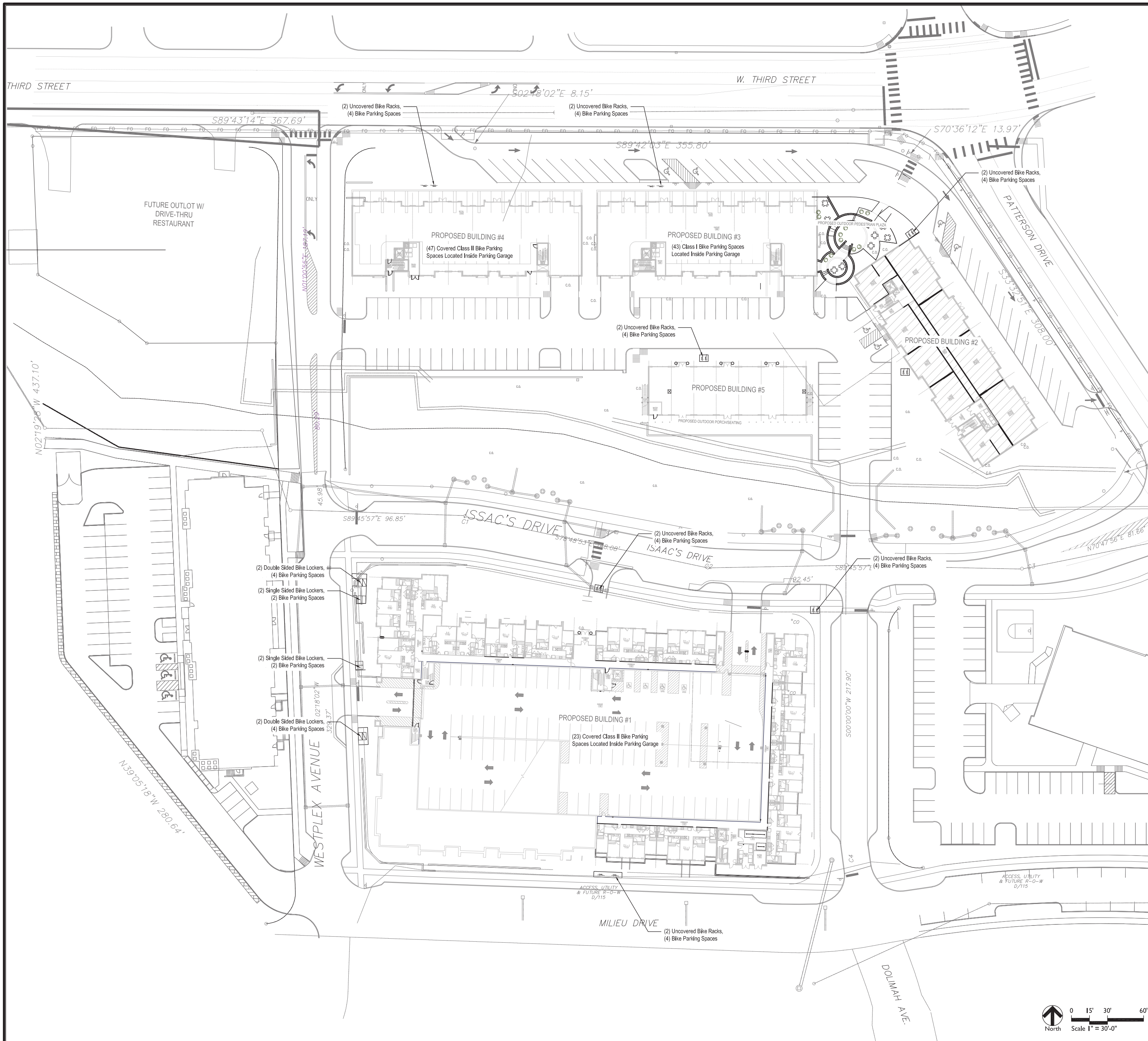
INTERMEDIATE ZONE SEED MIX

Common Name	**Latin Name**
Large Trees	
Sugar Maple	Acer saccharum
Shagbark Hickory	Carya ovata
Black Walnut	Juglans nigra
Sweetgum	Liquidambar styraciflua
Tulip Tree	Liriodendron tulipifera
Black Gum	Nyssa sylvatica
White Oak	Quercus alba
Medium Trees	
Red Maple	Acer rubrum
Bitternut Hickory	Carya cordiformis
Sugarberry	Celtic laevigata
Hackberry	Celtis occidentalis
Black Cherry	Prunus serotina
American Linden	Tilia americana
Small Trees	
Ironwood	Carpinus caroliniana
Pagoda Dogwood	Cornus alternifolia
Cockspur Hawthorn	Crataegus crus-galli
Kentucky Coffeetree	Gymnocladus dioicus
American Plum	Prunus americana
Shingle Oak	Quercus imbricata
Shrubs	
Grey Dogwood	Cornus racemosa
American Filbert	Corylus americana
Smooth Hydrangea	Hydrangea arborescens
Winterberry	Ilex verticilata

Grasses and Sedges		**Seed Rate** Ounces/Acre
Dense Blazing Star	Liatris spicata	2
Bergamot	Mondarda fistulosa	0.5
Foxglove Beardtongue	Penstemon digitalis	0.5
Mountain Mint	Pycnanthemum virginianum	0.5
Yellow Coneflower	Ratibida pinnata	4
Showy Blackeyed Susan	Rudbeckia fulgida speciosa	3
Balck-eyed Susan	Rudbeckia herta	4
Sweet Black-Eyed Susan	Rudbeckia subtomentosa	3
Rosinweed	Silphium integrifolium	2
Prairie Dock	Silphium terebinthinaceum	2
Riddell's Goldenrod	Solidago riddellii	1
Stiff Goldenrod	Solidago rigida	2
Smooth Ironweed	Vernonia fasciculata	2
Culver's Root	Veronicastrum virginicum	0.5
		27

STREAMSIDE ZONE SEED MIX

Common Name	Latin Name	Seed Rate ounces/acre
Large Trees		
Shellbark Hickory	Carya laciniosa	
Sweetgum	Liquidambar styraciflua	
Shumard Oak	Quercus shumardii	
Medium Trees		
Red Maple	Acer rubrum	
Sugarberry	Celtis laevigata	
Swamp White Oak	Quercus bicolor	
Small Trees		
Ironwood	Carpinus caroliniana	
Redbud	Cercis canadensis	
Pagoda Dogwood	Cornus alternifolia	
Cockspur Hawthorn	Crataegus crus-galli	
Shrubs		
Black Chokeberry	Aronia melanocarpa	
Gray Dogwood	Cornus racemosa	
Common Ninebark	Physocarpus opulifolius	
American Bladdernut	Staphulea trifolia	
Grasses and Sedges		
Bristly Sedge	Carex comosa	1
Crested Sedge	Carex cristatella	1
Frank's Sedge	Carex frankii	5
Porcupine Sedge	Carex hytstericina	2
Lurid Carex	Carex lurida	2
Awl-Fruited Sedge	Carex stipata	1.5
Pointed Oval Sedge	Carex tribuloides	1
Fox Sedge	Carex vulpinoides	4
Virginia Wild Rye	Elymus virginicus	64
Fowl Manna Grass	Glyceria striata	4
Rice Cut Grass	Leersea oryzoides	4
Switchgrass	Panicum virgatum	4
Dark Green Bulrush	Scirpus atrovirens	0.5
Prairie Cordgrass	Spartina pectinata	2
		96
Forbs		
Angelica	Angelica atropurpurea	2
Swamp Milkweed	Aslepias incarnata	2
Shining Aster	Aster firmus	1
New England Aster	Aster novae-angliae	1
Swamp Aster	Aster puniceus	1
Flat Topped Aster	Aster umbellata	1
False Aster	Boltonia latisquama	1
Wild Senna	Cassia hebecarpa	3
Spotted Joe-Pye Weed	Eupatorium maculatum	2
Boneset	Eupatorium perfoliatum	2
Autumn Sneezeweed	Helenium atutumnale	2
Dense Blazing Star	Liatris spicata	2
Cardinal Flower	Lobelia cardinalis	0.25
Great Blue Lobelia	Lobelia siphilitica	0.25
Monkey Flower	Mimulus ringens	0.5
Foxglove Beardstongue	Penstemon digitalis	1
Mountain Mint	Pycnanthemum virginianum	1
Showy Black-eyed Susan	Rudbeckia fulgida speciosa	3
Black-eyed Susan	Rudbeckia hirta	4
Sweet Black-eyed Susan	Rudbeckia subtomentosa	3
Rosinweed	Silphium integrifolium	2
Cupplant	Silphium perfoliutum	2
Prairie Dock	Silphium terebinthinaceum	2
Swamp Goldenrod	Solidago patula	1
Riddell's Goldenrod	Solidago riddellii	2
Blue Vervain	Verbena hastata	2
Smooth Ironweed	Solidago fasciculata	2
Culver's Root	Veronicastrum virginicum	1
Golden Alexanders	Zizia aurea	1
		48



BIKE PARKING

LOT 1

Required: 35 Spaces (72 Units, 205 Beds)
9 Class I Spaces
26 Class II Spaces, 18 Covered
9 Short Term Commercial Spaces

Provided: 99 Spaces
43 Class I Spaces
47 Class II Spaces, 47 Covered
16 Short Term Commercial Spaces
(within 50' of each main entrance)

LOT 2

Required: 46 Spaces (106 Units, 272 Beds)
12 Class I Spaces
34 Class II Spaces, 23 Covered

Provided: 46 Spaces
12 Class I Spaces
34 Class II Spaces, 23 Covered
(within 50' of each main entrance)

CSO Architects
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Main 317.848.7800 · csoinc.net

context DESIGN
12 S Main St, Ste 200 | Fortville, IN 46040
317-485-6900 | www.context-design.com

PROJECT:
Patterson Pointe
Bloomington, Indiana

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.
The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract.
On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

ISSUE DATE	DRAWN BY	CHECKED BY
12/26/16	JT	APP

DRAWING TITLE:
BIKE PARKING PLAN

CERTIFIED BY:

DRAWING NUMBER
BIKE

PROJECT NUMBER
16076

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Transportation & Site Engineering
Creating Order Since 1966
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Indianapolis, IN 46240
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TRAFFIC STUDY

PROPOSED MIXED-USE DEVELOPMENT

3RD STREET & PATTERSON DRIVE

BLOOMINGTON, INDIANA

PREPARED FOR

PATTERSON POINTE, LLC.

DECEMBER 2016
REVISED

TABLE OF CONTENTS

LIST OF FIGURES

CERTIFICATION

I certify that this **TRAFFIC IMPACT STUDY** has been prepared by me and under my immediate supervision and that I have experience and training in the field of traffic and transportation engineering.

A&F ENGINEERING CO., LLC

R. Matt Brown, P.E.
Indiana Registration 10200056

Dixian Qiu, E.I
Traffic Engineer

Antoun Fadoul
Traffic Engineer

INTRODUCTION

This **TRAFFIC IMPACT STUDY**, prepared on behalf of Patterson Pointe, LLC., is for a proposed mixed-use development that is to be located at the southwest quadrant of 3rd Street & Patterson Drive in Bloomington, Indiana.

PURPOSE

The purpose of this analysis is to determine what affect the proposed development will have on the existing adjacent roadway system. This analysis will identify any roadway deficiencies that may occur when this site is developed.

Conclusions will be reached that will determine if the roadway system can accommodate the anticipated traffic volumes or will determine the modifications that will be required to the system if there will be deficiencies in the system resulting from the changes.

Recommendations will be made that will address the conclusions resulting from this analysis. These recommendations will address feasible roadway system improvements that will accommodate the proposed development generated traffic volumes such that there will be safe ingress and egress, to and from the proposed development, with minimal interference to traffic on the public street system.

SCOPE OF WORK

The scope of work for this analysis is as follows:

First, obtain peak hour turning movement traffic volume counts between the hours of 6:30 A.M. to 8:30 A.M. and 4:30 P.M. to 6:30 P.M. at the following intersections:

- Patterson Drive & 3rd Street
- Patterson Drive & Isaac Drive

In addition, certain movements were counted at the intersection of 3rd Street & Adams Street for the re-assignment of the existing traffic volumes and traffic volume counts at the intersection of 3rd Street & Westplex Avenue were obtained from a previous traffic study conducted in 2009.

Second, crash data was obtained for the past four years from the City of Bloomington at the following intersections:

- 3rd Street & Westplex Avenue
- 3rd Street & Cory Lane
- 3rd Street & Johnson Avenue

Third, reassign the existing traffic volumes to the intersection of 3rd Street and South Westplex Avenue. This reassignment takes into account existing onsite vehicles that currently use Patterson Avenue to access 3rd Street that will now use the proposed connection onto 3rd Street.

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PROPOSED MIXED-USE DEVELOPMENT
3RD STREET & PATTERSON DRIVE – BLOOMINGTON, INDIANA

Fourth, estimate the number of peak hour trips that will be generated by the proposed development.

Fifth, assign and distribute the generated traffic volumes from the proposed development to the roadway network.

Sixth, perform a peak hour traffic signal warrant analysis at the intersection of 3rd Street & Westplex Avenue according to the methods outlined in the *Indiana Manual on Uniform Traffic Control Devices for Streets and Highways (IMUTCD)*[1].

Seventh, prepare a capacity analysis, level of service analysis and queue length analysis at the intersection of 3rd Street and Westplex Avenue for the sum of reassigned existing traffic volumes and generated traffic volumes from the proposed development.

Eighth, conduct a safety analysis at the intersection of 3rd Street and Westplex Avenue to identify possible safety shortcomings at this location.

Ninth, review two proposed parking options along 3rd Street and Patterson Drive.

Tenth, prepare recommendations for the roadway cross-sections that will be needed to accommodate the total volumes for each of the scenarios listed above.

Finally, prepare a **TRAFFIC IMPACT STUDY** report documenting all data, analyses, conclusions and recommendations to best provide for the safe and efficient movement of traffic through the study area.

DESCRIPTION OF THE PROJECT

The proposed mixed-use development will consist of approximately 178 apartments and approximately 33,000 SF of commercial space. As proposed, the development will be served by Isaac Drive, Milieu Drive, Adams Street, and a full access drive along 3rd Street. **Figure 1** is an area map showing the location and general layout of the site.

STUDY AREA

The study area for this analysis has been defined to include the intersection of 3rd Street & Westplex Avenue. **Figure 2** shows the existing intersection geometrics at this location.

[1] *Indiana Manual on Uniform Traffic Control Devices for Streets and Highways (IMUTCD)*, Federal Highway Administration, 2011

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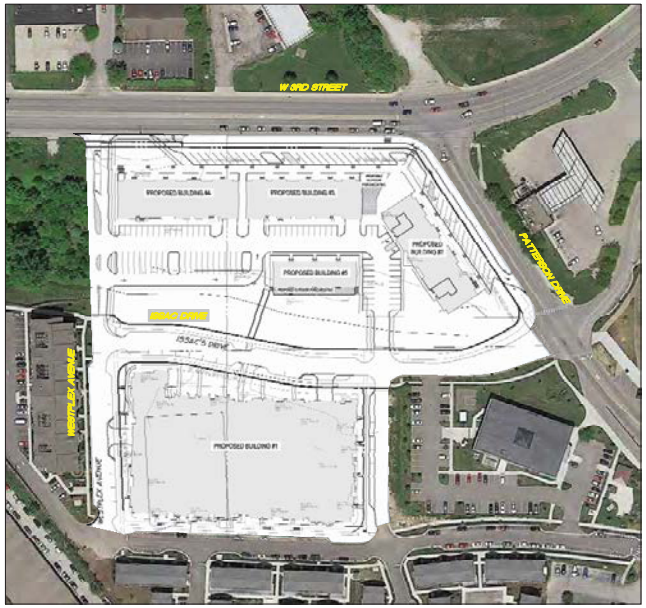

FIGURE 1

AREA MAP

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BLOOMINGTON, IN

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3RD STREET & WESTPLEX AVENUE

FIGURE 2

EXISTING INTERSECTION GEOMETRICS

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BLOOMINGTON, IN

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DESCRIPTION OF ABUTTING STREET SYSTEM

3RD STREET – is an east/west, four lane roadway with a two-way left-turn lane median to the north of the proposed development with a posted speed limit of 30 mph in the vicinity of the site. According to the Bloomington Comprehensive Plan, 3rd Street is classified as a Primary Arterial.

PATTERSON DRIVE – is an northwest/southeast, two lane undivided roadway to the east of the proposed development with a posted speed limit of 30 mph in the vicinity of the site. According to the Bloomington Comprehensive Plan, Patterson Drive is classified as a Secondary Arterial.

EXISTING TRAFFIC VOLUMES & PEAK HOUR

Peak hour turning movement traffic volume counts were obtained at the intersections of Patterson Drive & 3rd Street and Paterson Drive & Isaac Drive by A&F Engineering Co., LLC. These counts include all "through" traffic and all "turning" traffic at the intersection. The counts were made between the hours of 6:30 AM and 8:30 AM and 4:30 PM and 6:30 PM during a typical weekday in November 2016. The count output summary sheets for all traffic counts are included in the **Appendix**. In addition, the existing traffic volumes at the intersection of 3rd Street and Westplex Avenue were obtained from a previous traffic study conducted in 2009. The existing peak hour traffic volumes are shown on **Figure 3**.

REASSIGNMENT OF EXISTING TRAFFIC VOLUMES

A new connection to 3rd Street will be provided in conjunction with the development of this site. As a result, part of the existing traffic using Patterson Street to access 3rd Street will direct to this new connection. To account for the changes in traffic patterns under the proposed roadway conditions, the existing traffic volumes accessing 3rd Street have been reassigned accordingly. The re-assignment of the existing traffic volumes is shown on **Figure 4**.

GENERATED TRAFFIC VOLUMES FOR PROPOSED DEVELOPMENT

The estimate of newly generated traffic is a function of the development size and of the character of the land use. The ITE *Trip Generation Manual*[2] was used to calculate the number of new trips that will be generated by the proposed development. This report is a compilation of trip data for various land uses as collected by transportation professionals throughout the United States in order to establish the average number of trips generated by those land uses. **Table 1** is a summary of the total trips that will be generated during the peak hours at the development site.

[2] *Trip Generation Manual*, Institute of Transportation Engineers, Ninth Edition, 2012.

TABLE 1 – TOTAL GENERATED TRIPS FOR PROPOSED DEVELOPMENT

DEVELOPMENT INFORMATION			GENERATED TRIPS			
LAND USE	ITE CODE	SIZE	AM ENTER	AM EXIT	PM ENTER	PM EXIT
Shopping Center	820	33,000 SF	49	30	137	148
Apartment	220	178 DU	18	73	75	41
Total Generated Trips			67	103	212	189

PASS-BY & INTERNAL TRIPS

Pass-by trips are trips that are already in the existing traffic stream along the adjacent public roadway system that enter a site, utilize the site, and then return back to the existing traffic stream. A significant number of the generated trips from the proposed development will be pass-by trips. However, the pass-by trips were considered negligible in this analysis in order to provide a "worse case" traffic scenario.

An internal trip results when a trip is made between two or more land uses without traversing the external public roadway system. Internal trips will occur between different land-uses within the proposed development. These trips were calculated based on the methods described within the ITE *Trip Generation Handbook*[3]. A summary of trip reductions for the proposed development is shown in **Table 2**.

TABLE 2 –INTERNAL TRIP REDUCTIONS FOR PROPOSED DEVELOPMENT

DEVELOPMENT INFORMATION			GENERATED TRIPS			
LAND USE	ITE CODE	SIZE	AM PEAK		PM PEAK	
			ENTER	EXIT	ENTER	EXIT
Shopping Center	**820**	**33,000 SF**	49	30	137	148
Shopping Center Internal Trips			1	0	14	35
Shopping Center External Trips			48	30	123	113
Apartment	**220**	**178 DU**	18	73	75	41
Apartment Internal Trips			0	1	35	14
Apartment External Trips			18	72	40	27
TOTAL INTERNAL TRIPS			1	1	49	49
TOTAL EXTERNAL TRIPS			66	102	163	140

[3] *Trip Generation Handbook*, Institute of Transportation Engineers, 2004.

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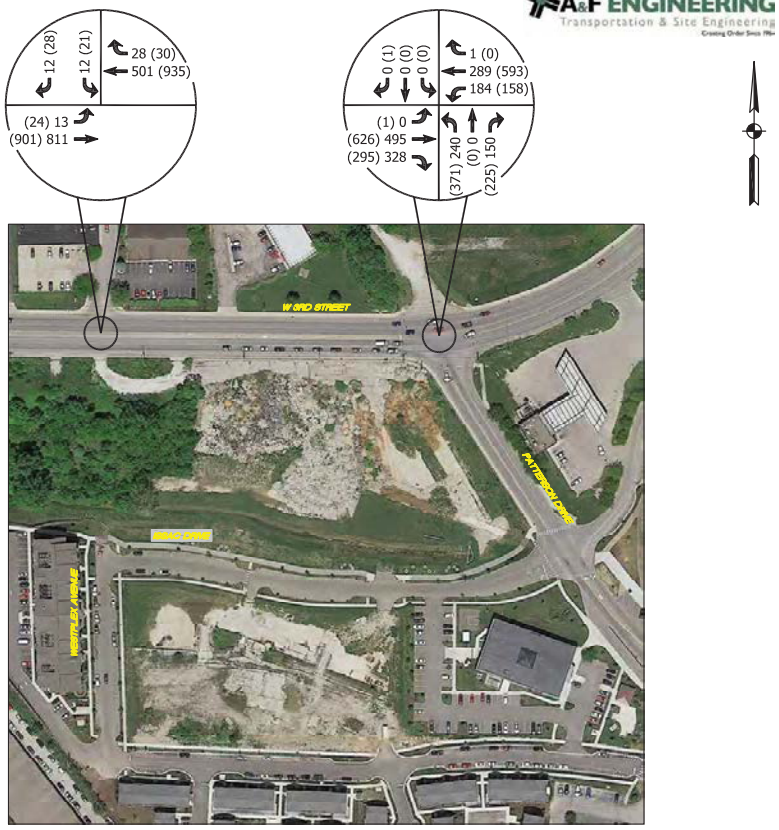

LEGEND
XX = A.M. PEAK HOUR
(XX) = P.M. PEAK HOUR
* = NEGLIGIBLE

FIGURE 3

EXISTING TRAFFIC VOLUMES

TRAFFIC STUDY
PATTERSON POINTE, LLC
BLOOMINGTON, IN

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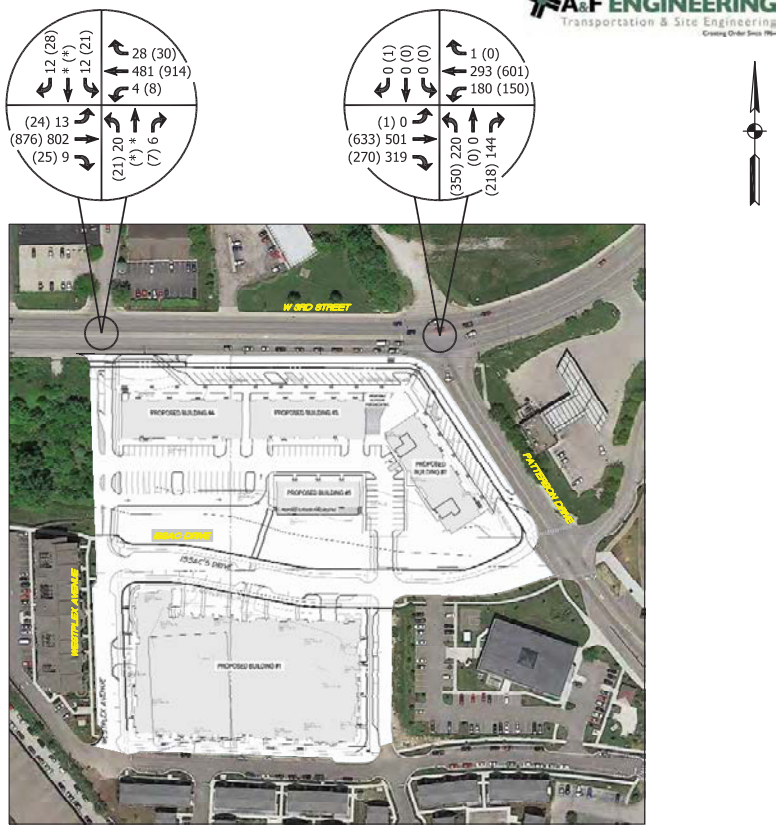

LEGEND
XX = A.M. PEAK HOUR
(XX) = P.M. PEAK HOUR
* = NEGLIGIBLE

FIGURE 4

RE-ASSIGNED TRAFFIC VOLUMES

TRAFFIC STUDY
PATTERSON POINTE, LLC
BLOOMINGTON, IN

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ASSIGNMENT AND DISTRIBUTION OF GENERATED TRIPS

The study methodology used to determine the traffic volumes from the proposed development that will be added to the street system is defined as follows:

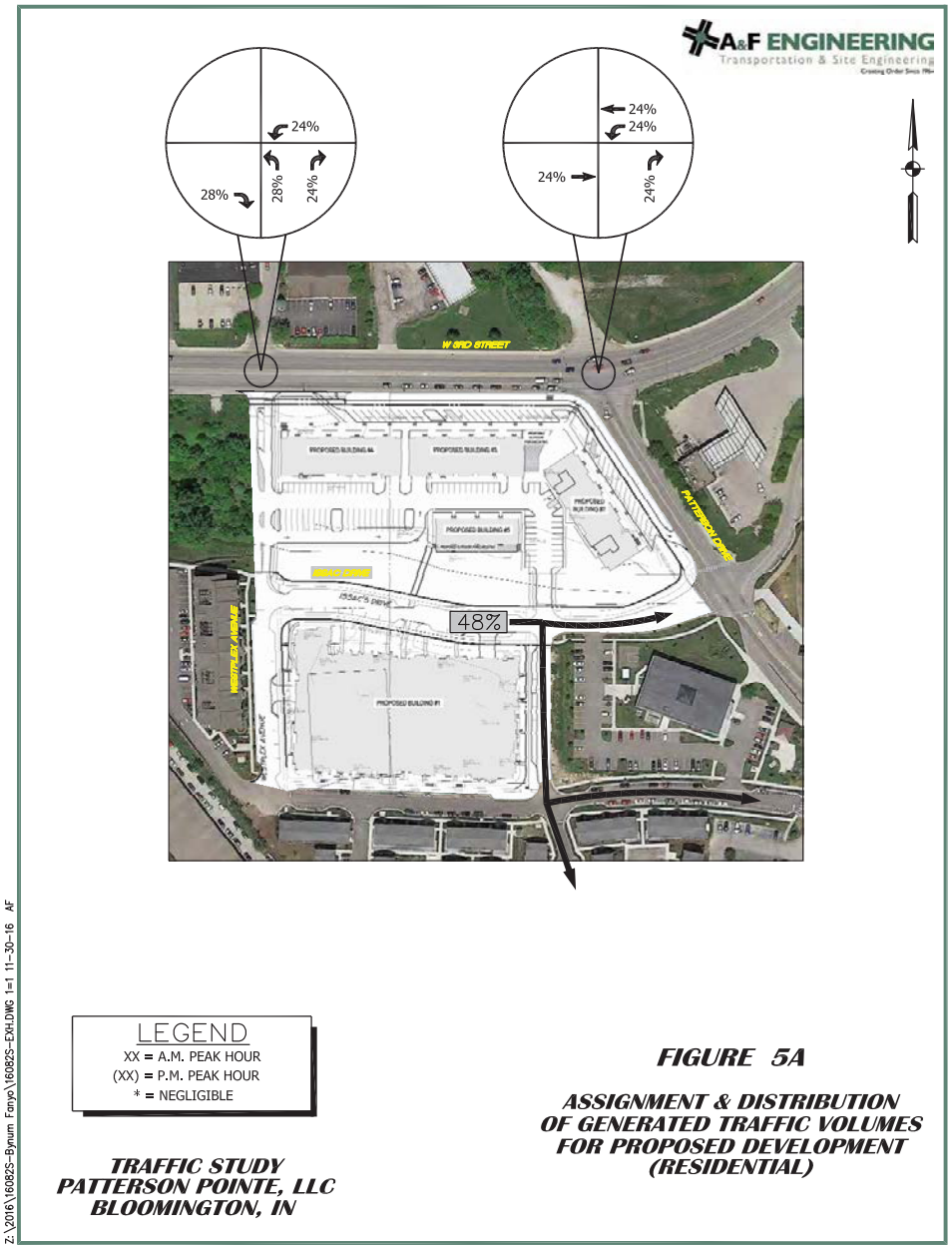
1. The volume of traffic that will enter and exit the project site must be assigned to the access points and to the public street system. Using the traffic volume data collected for this analysis, traffic to and from the proposed development has been assigned to the proposed driveways and to the public street system that will be serving the site.
2. To determine the volumes of traffic that will be added to the public roadway system, the generated traffic must be distributed by direction to the public roadways at their intersection with the driveways. For the proposed development, the trip distribution was based on the location of the development, the existing traffic patterns, and the assignment of generated traffic.

It should be noted that the traffic entering the proposed parking area along 3rd Street was assigned to the intersections of 3rd Street & Westplex Avenue, Patterson Drive & Isaacs Drive, Patterson Drive & Adams Street, and Adams Street & Milieu Drive for worst case scenario.
The generated traffic assignment & distribution percentages for the residential portion and retail portion of the proposed development are shown on **Figure 5A** and **Figure 5B** respectively.

GENERATED TRIPS ADDED TO THE STREET SYSTEM

The total generated traffic volumes that can be expected from the proposed development have been assigned to each of the study intersections. These volumes were determined based on the previously discussed trip generation data, assignment of generated traffic and distribution of generated traffic. The total peak hour generated traffic volumes from the proposed development are shown in **Figure 6**.

Additional figures located in the **Appendix** show the separated generated traffic volumes from the residential and retail portions of the proposed development.



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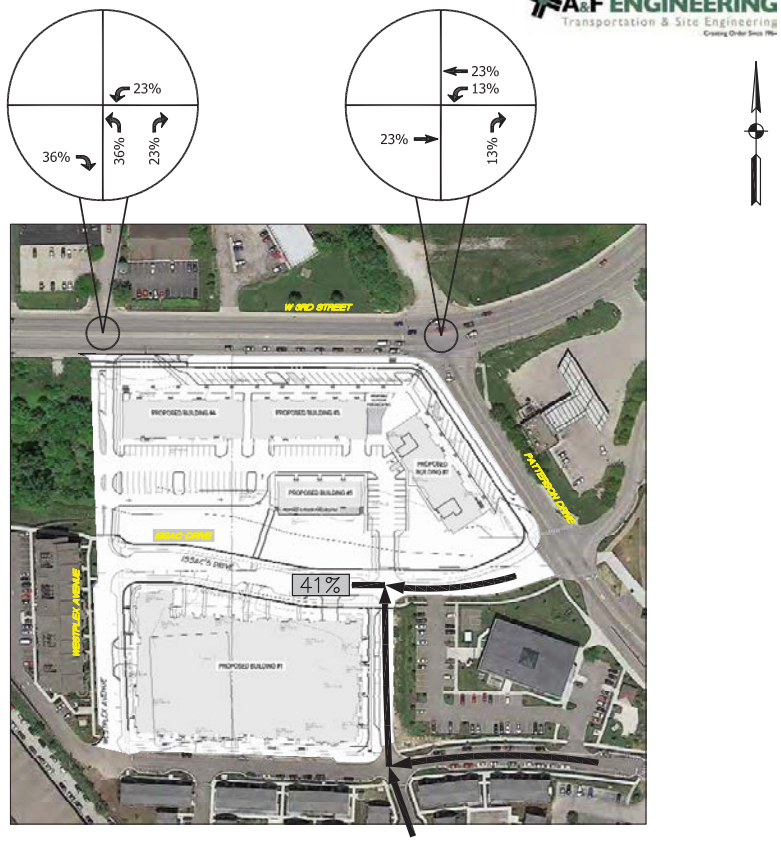

LEGEND
XX = A.M. PEAK HOUR
(XX) = P.M. PEAK HOUR
* = NEGLIGIBLE

FIGURE 5B

ASSIGNMENT & DISTRIBUTION OF GENERATED TRAFFIC VOLUMES FOR PROPOSED DEVELOPMENT (RETAIL)

TRAFFIC STUDY
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BLOOMINGTON, IN

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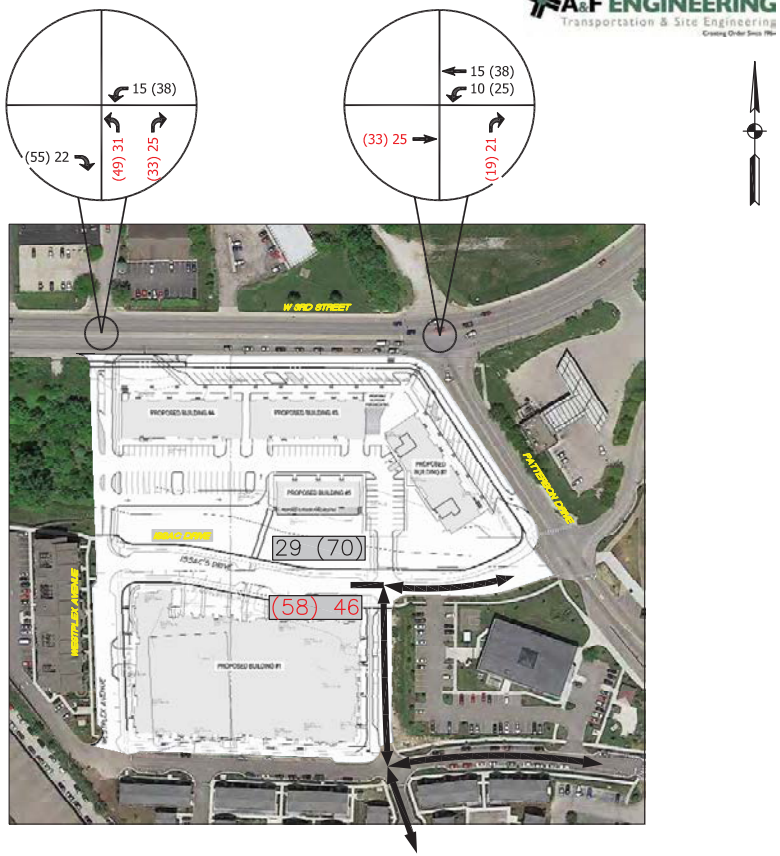

LEGEND
XX = A.M. INBOUND TRAFFIC
(XX) = P.M. INBOUND TRAFFIC
XX = A.M. OUTBOUND TRAFFIC
(XX) = P.M. OUTBOUND TRAFFIC
* = NEGLIGIBLE

FIGURE 6

TOTAL GENERATED TRAFFIC VOLUMES FROM PROPOSED DEVELOPMENT

TRAFFIC STUDY
PATTERSON POINTE, LLC
BLOOMINGTON, IN

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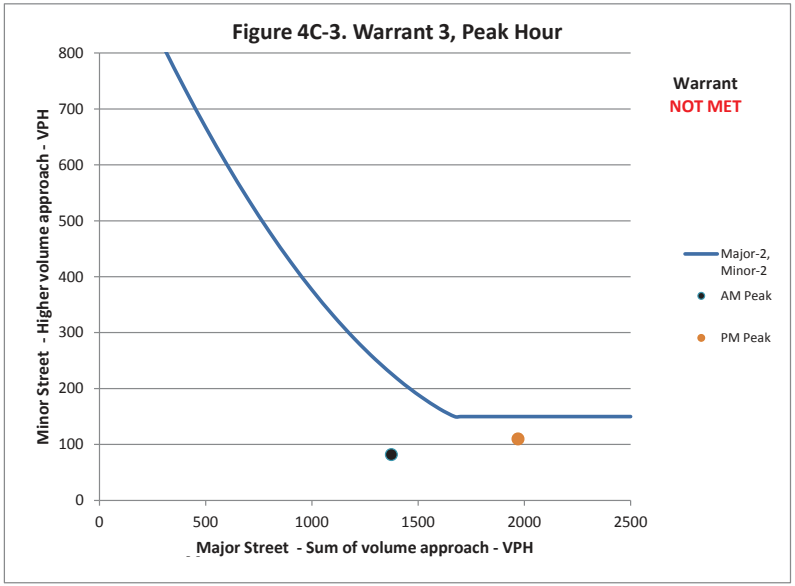
PEAK HOUR TRAFFIC SIGNAL WARRANT ANALYSIS

A peak hour traffic signal warrant analysis has been conducted in order to determine if a traffic signal is warranted at the intersection of 3rd Street & Westplex Avenue based on the sum of re-assigned traffic volumes and generated traffic volumes from the proposed development. To qualify for the installation of a traffic signal, the Peak Hour Traffic Signal Warrant from the *Indiana Manual on Uniform Traffic Control Devices for Streets and Highways (IMUTCD)* must be met.

Plotted Point	Hour	Major Street (sum of approaches)	Minor Street (highest approach)
1	7:30 AM – 8:30 AM	1374	82
2	4:30 PM – 5:30 PM	1970	110



RESULT: Warrant 3: Peak Hour Volume is NOT met because the points fall below the curve on Figure 4C-3.

CAPACITY ANALYSIS

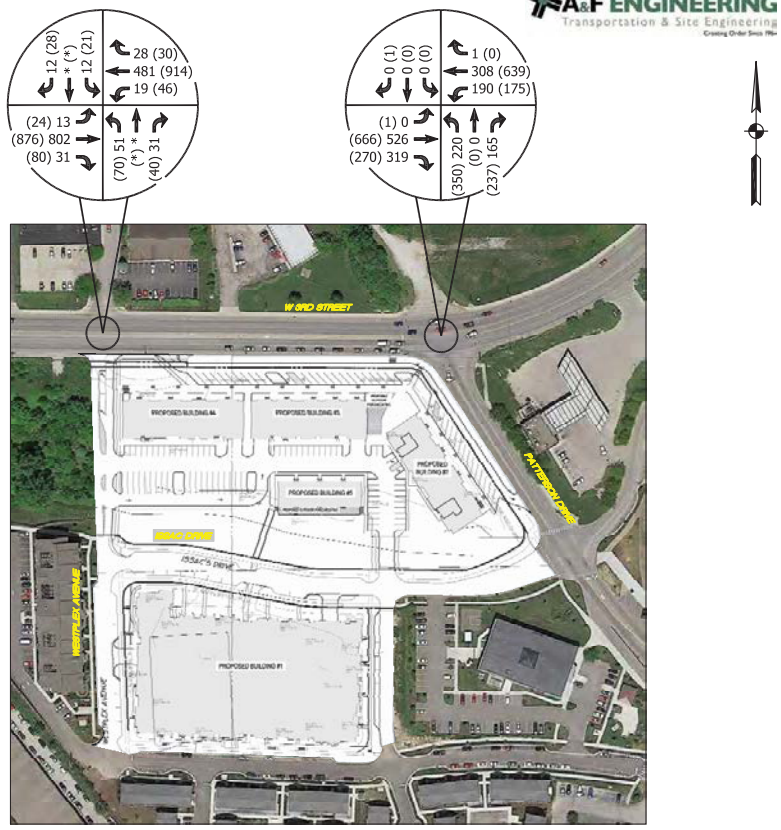
The "efficiency" of an intersection is based on its ability to accommodate the traffic volumes that approach the intersection. It is defined by the Level-of-Service (LOS) of the intersection. The LOS is determined by a series of calculations commonly called a "capacity analysis". Input data into a capacity analysis include traffic volumes, intersection geometry, and number and use of lanes. To determine the LOS at each of the study intersections, a capacity analysis has been made using the recognized computer program *Synchro/SimTraffic*[4]. This program allows intersections to be analyzed and optimized using the capacity calculation methods outlined within the *Highway Capacity Manual (HCM)*[5]. The following list shows the delays related to the levels of service for unsignalized intersections:

Level of Service	Control Delay (seconds/vehicle) UNSIGNALIZED
A	Less than or equal to 10
B	Between 10.1 and 15
C	Between 15.1 and 25
D	Between 25.1 and 35
E	Between 35.1 and 50
F	greater than 50

CAPACITY ANALYSIS SCENARIOS

To evaluate the proposed development's effect on the public street system, the total generated traffic volumes from the proposed development were added to the reassigned existing traffic volumes to determine the adequacy of the existing roadway network. In addition, recommendations can be formulated for the intersection of 3rd Street & Westplex Avenue so that it will accommodate the future traffic volumes. An analysis has been made for the AM peak hour and PM peak hour at the study intersection for the sum of the reassigned existing traffic volumes and generated traffic volumes from the proposed development. **Figure 7** is a summary of these traffic volumes at the study intersection for the AM and PM peak hours.

[4] *Synchro/SimTraffic 9.1*, Trafficware, 2015.
[5] *Highway Capacity Manual (HCM)* Transportation Research Board, National Research Council, Washington, DC, 2010.



LEGEND
XX = A.M. PEAK HOUR
(XX) = P.M. PEAK HOUR
* = NEGLIGIBLE

TRAFFIC STUDY
PATTERSON POINTE, LLC
BLOOMINGTON, IN

FIGURE 7

SUM OF RE-ASSIGNED TRAFFIC VOLUMES AND GENERATED TRAFFIC VOLUMES FOR PROPOSED DEVELOPMENT

Z:\2016\160825-Bynum Fanyo\160825-EXH.DWG 1=1 11-30-16 AF

The following table summarizes the level of service results at the intersection of 3rd Street & Westplex Avenue. The *Synchro* (*HCM* 2010) intersection reports illustrating the capacity analysis results are included in the **Appendix**.

TABLE 3 – LEVEL OF SERVICE SUMMARY: 3RD STREET & WESTPLEX AVENUE

MOVEMENT	AM PEAK HOUR			PM PEAK HOUR		
	LOS	Delay (s)	v/c	LOS	Delay (s)	v/c
Northbound Left-Turn	F	67.6	0.525	F	238.4	1.077
Northbound Through/Right-Turn	B	12.3	0.068	B	12.5	0.079
Southbound Left-Turn	D	32.0	0.095	F	84.2	0.328
Southbound Through/Right-Turn	B	10.2	0.020	B	12.2	0.055
Eastbound Left-Turn	A	8.70	0.015	B	10.2	0.035
Westbound Left-Turn	B	10.2	0.031	B	10.5	0.067

*The results shown above are based on the proposed intersection conditions which include the following:

- Construction of a northbound approach with two outbound lanes and one inbound lane.
- Conversion of the existing Two-Way Left-Turn Lane to become exclusive Eastbound and Westbound left-turn lanes.
- Two-Way Stop Control with the Northbound and Southbound stopping for 3rd Street.

QUEUE LENGTH ANALYSIS

A queue length analysis was conducted at the intersection of 3rd Street & Westplex Avenue to determine the required storage length of the westbound left-turn lane to accommodate the queues resulting from the addition of the northbound leg and the future traffic volumes. A summary of the 95th percentile queue length for the AM and PM peak hour estimated from *SimTraffic 9* is shown in **Table 4**.

TABLE 4 – 95TH PERCENTILE QUEUE LENGTH SUMMARY

INTERSECTION	WESTBOUND LEFT-TURN	
	AM PEAK HOUR	PM PEAK HOUR
3rd Street & Westplex Avenue	34’	54’

The queue length analysis has shown that the 95th percentile queue length will be approximately 54 feet. Therefore, it is recommended that the length of the westbound left-turn lane be at least 75 feet.

SAFETY ANALYSIS

A safety analysis was conducted at the intersection of 3rd Street & South Westplex Avenue to identify any safety concerns at this intersection and make necessary recommendations accordingly. Crash data for the past four years was obtained at these intersections from the City of Bloomington. The crash data and peak hour volume data at each intersection is summarized in **Table 5**.

TABLE 5 – CRASH DATA SUMMARY (2013-2016)

INTERSECTION	TYPE OF CRASH						Total	Average	Estimated Peak Hour Traffic Volume*
	Head On	Left-Turn	Rear End	Right Angle	Ped	Side Swipe			
3rd St & Johnson Ave	1	1	1	0	1	0	4	1	1,769
3rd St & Westplex Ave	0	0	4	1	0	0	5	1.25	1,939
3rd St & Cory Ln.	0	1	5	1	0	1	8	2	2,194

*The estimated peak hour traffic volumes at 3rd Street & Johnson Avenue were obtained from the City of Bloomington. The northbound/southbound, eastbound, and westbound approaches were collected in 2008, 2011, and 2012, respectively. The traffic volumes at the intersection of 3rd Street & Westplex Avenue were obtained from a previous study conducted in 2009 and the traffic volume counts at 3rd Street & Cory Lane were collected by the city of Bloomington in 2011.

According to the data, there has not been a high rate of crashes over the past four years at these intersections. Based on the traffic volumes at each location and the absence of a high amount of crashes at these sites, it is not anticipated that safety will be significantly compromised at the intersection of 3rd Street & Westplex Avenue when the northbound leg is constructed and the future traffic volumes are added to the roadway network.

PARKING REVIEW

Two angled parking options have been proposed for this development along 3rd Street and Patterson Drive. The two options are described as follows:

- Option 1 –Angled parking spaces separated from 3rd Street and Patterson Drive by a 10 feet raised median. This separation will create a "Boulevard Style" parking area that will be accessed from eastbound 3rd Street and exit on Patterson Drive.
- Option 2 – Direct-on-street angled parking along 3rd Street and Patterson Drive. This parking area will be separated from the through-lanes along 3rd Street and Patterson Drive by a 10 feet non-raised buffer area.

After reviewing these options, Option 2 would have significantly more conflict points compared to Option 1 due to vehicles backing directly onto 3rd Street. It is recommended that if Option 1 is pursued; then access to the parking area should be controlled via a raised center median along 3rd Street to prohibit westbound left-turns from entering the parking area. This median would only have to be long enough to block the limits of the parking access drive along 3rd Street.

On the other hand, if Option 2 is desired, it is recommended that a raised center median be constructed along 3rd Street and Patterson Drive to restrict left-turns into each individual parking stall. This median would have to be long enough to cover the entire parking area along 3rd Street and Patterson Drive.

CONCLUSIONS & RECOMMENDATIONS

Capacity Analysis – A capacity analysis review for the sum of reassigned existing traffic volumes and generated traffic volumes from the proposed development has shown that the eastbound and westbound left-turns at the intersection of 3rd Street & Westplex Avenue will operate at acceptable levels of service during the AM and PM peak hours with proposed intersection conditions. On the other hand, the northbound and southbound approaches will experience increased delays during the peak hours due to the high traffic volumes along 3rd Street. However, sufficient gaps from the upstream and downstream traffic signals will be created that should allow the northbound and southbound traffic to access 3rd Street.

Queue Length Analysis – A queue length analysis has shown that the 95th percentile queue length for the westbound left-turn movement at the intersection of 3rd Street & Westplex Avenue will be approximately 54 feet long.

Safety Analysis – Based on the traffic and crash data, it is not anticipated that safety will be significantly compromised at the intersection of 3rd Street & Westplex Avenue when the northbound leg is constructed and the future traffic volumes are added to the roadway network.

Parking Review – Two parking options were examined. Option 1 was a "Boulevard Style" parking area that physically separates parking stalls from the adjacent roadway and Option 2 was direct-on-street parking. A comparison shows that Option 1 has fewer conflict points when compared to Option 2.

Recommendations – The recommended intersection conditions at 3rd Street & Westplex Avenue are as follows:

- Construction of a full northbound access drive with one inbound lane and two outbound lanes.
- Conversion of the existing Two-Way Left-Turn Lane into an exclusive eastbound and westbound left-turn lane. The westbound left-turn lane should be at least 75 feet in length at the intersection.
- Two-Way Stop Control with the northbound and southbound stopping for 3rd Street.

Parking Options:

- Option 1: It is recommended that access to the parking area be controlled via a raised center median along 3rd Street to prohibit westbound left-turns from entering the parking area.
- Option 2: It is recommended that a raised center median be constructed along 3rd Street and Patterson Drive to restrict left-turns into each individual parking stall.

TRAFFIC IMPACT STUDY

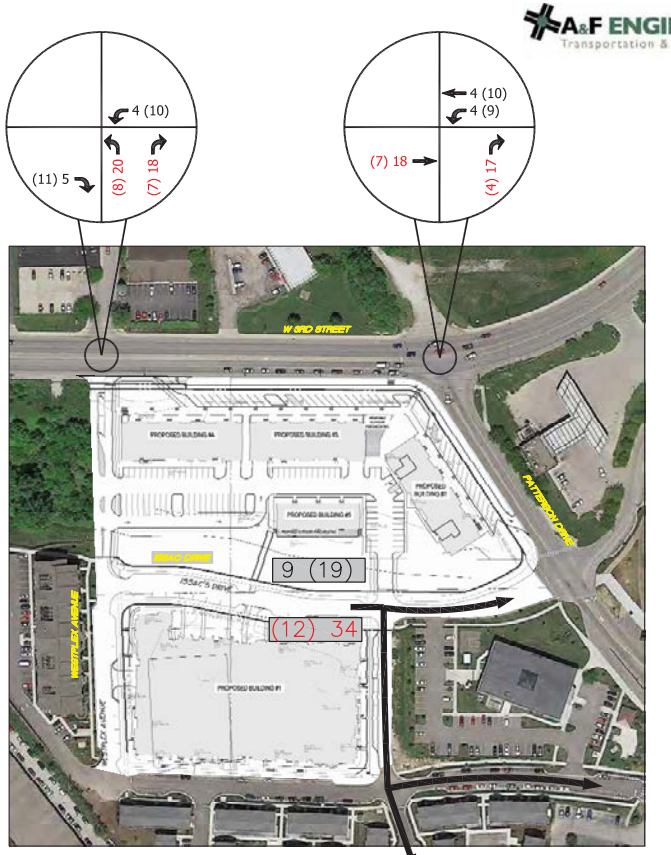
APPENDIX

A&F ENGINEERING
Transportation & Site Engineering
Creating Order Since 1966

8365 Keystone Crossing Boulevard, Suite 201
Indianapolis, IN 46240
Phone: (317) 202-0864 Fax: (317) 202-0908

ADDITIONAL FIGURES

A&F ENGINEERING
Transportation & Site Engineering



LEGEND
XX = A.M. INBOUND TRAFFIC
(XX) = P.M. INBOUND TRAFFIC
XX = A.M. OUTBOUND TRAFFIC
(XX) = P.M. OUTBOUND TRAFFIC
* = NEGLIGIBLE

TRAFFIC STUDY
PATTERSON POINTE, LLC
BLOOMINGTON, IN

FIGURE A

GENERATED TRAFFIC VOLUMES FROM PROPOSED DEVELOPMENT (RESIDENTIAL)

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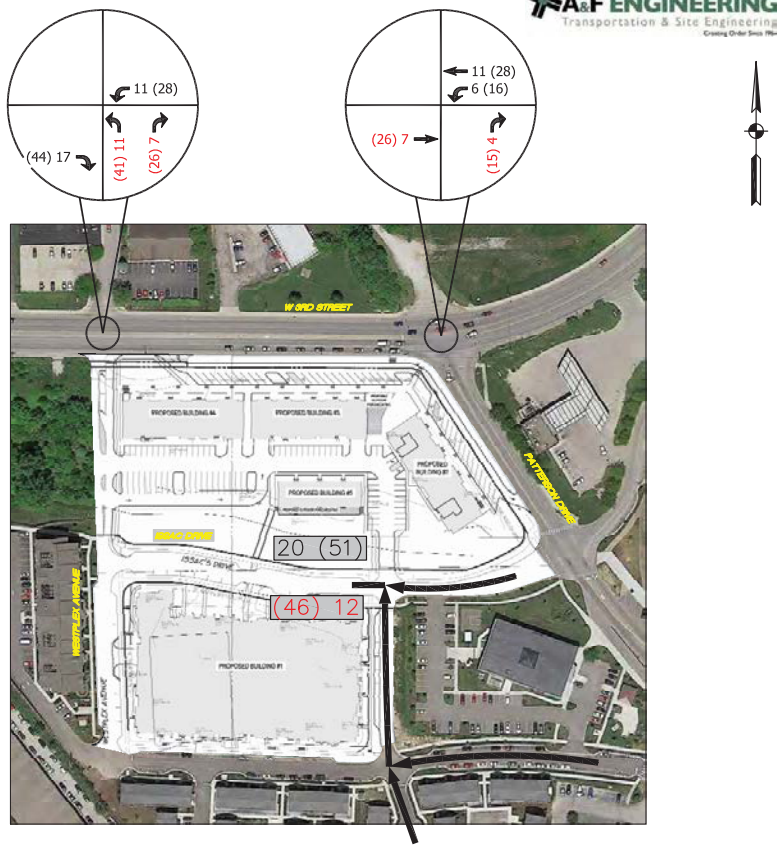

LEGEND

XX = A.M. INBOUND TRAFFIC
(XX) = P.M. INBOUND TRAFFIC
XX = A.M. OUTBOUND TRAFFIC
(XX) = P.M. OUTBOUND TRAFFIC
* = NEGLIGIBLE

TRAFFIC STUDY
PATTERSON POINTE, LLC
BLOOMINGTON, IN

FIGURE B

GENERATED TRAFFIC VOLUMES FROM PROPOSED DEVELOPMENT (RETAIL)

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PATTERSON DRIVE & 3RD STREET

TRAFFIC VOLUME COUNTS

A & F ENGINEERING CO., LLC
TRAFFIC VOLUME SUMMARY

CLIENT : Bynum Fanyo
INTERSECTION : Patterson Drive & 3rd Street
DATE : 11/17/2016
COUNTED BY : Miovision

TOTAL VEHICLES (PASSENGER CARS + TRUCKS)

	AM PEAK HOUR VOLUMES BEGINS 7:30 AM				OFF PEAK HOUR VOLUMES BEGINS				PM PEAK HOUR VOLUMES BEGINS 4:30 PM			
	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL
NORTHBOUND	240	0	150	**390**					371	0	225	**596**
SOUTHBOUND	0	0	0	**0**					0	0	1	**1**
EASTBOUND	0	495	328	**823**					1	626	295	**922**
WESTBOUND	184	289	1	**474**					158	593	0	**751**

PEAK HOUR FACTOR

	AM PEAK HOUR FACTOR		OFF PEAK HOUR FACTOR		PM PEAK HOUR FACTOR	
	APPROACH	INTERSECTION	APPROACH	INTERSECTION	APPROACH	INTERSECTION
NORTHBOUND	0.92				0.95	
SOUTHBOUND	#DIV/0!	0.86			0.25	0.97
EASTBOUND	0.78				0.94	
WESTBOUND	0.94				0.91	

TRUCK PERCENTAGE

	AM PEAK HOUR PERCENTAGE				OFF PEAK HOUR PERCENTAGE				PM PEAK HOUR PERCENTAGE			
	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL
NORTHBOUND	4.2%	0.0%	2.7%	3.6%					1.1%	0.0%	0.9%	1.0%
SOUTHBOUND	0.0%	0.0%	0.0%	0.0%					0.0%	0.0%	0.0%	0.0%
EASTBOUND	0.0%	3.2%	2.7%	3.0%					0.0%	0.8%	3.4%	1.6%
WESTBOUND	2.7%	3.8%	0.0%	3.4%					1.3%	1.2%	0.0%	1.2%

HOURLY SUMMARY

HOUR			NB	SB	NB+SB	EB	WB	EB+WB	TOTAL
6:00 AM	TO	7:00 AM	89	0	89	186	104	290	379
7:00 AM	TO	8:00 AM	318	0	318	757	397	1154	1472
8:00 AM	TO	9:00 AM	193	0	193	330	228	558	751
4:00 PM	TO	5:00 PM	314	1	315	451	353	804	1119
5:00 PM	TO	6:00 PM	533	1	534	900	736	1636	2170
6:00 PM	TO	7:00 PM	192	0	192	340	257	597	789
TOTAL VOLUME			1639	2	1641	2964	2075	5039	6680
PERCENTAGE			24.5%	0.0%	24.6%	44.4%	31.1%	75.4%	100.0%

A & F ENGINEERING CO., LLC
TRAFFIC VOLUME SUMMARY

CLIENT : Bynum Fanyo
INTERSECTION : Patterson Drive & 3rd Street
DATE : 11/17/2016

DIRECTION OF TRAVEL : NORTHBOUND

HOUR	LEFT			THROUGH			RIGHT			TOTAL		
AM TIME PERIOD	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH
6:00 AM - 7:00 AM	61	3	64	0	0	0	25	0	25	86	3	89
7:00 AM - 8:00 AM	186	12	198	0	0	0	116	4	120	302	16	318
8:00 AM - 9:00 AM	115	5	120	0	0	0	70	3	73	185	8	193
PM TIME PERIOD	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH
4:00 PM - 5:00 PM	188	3	191	0	0	0	122	1	123	310	4	314
5:00 PM - 6:00 PM	335	1	336	0	0	0	190	7	197	525	8	533
6:00 PM - 7:00 PM	120	1	121	0	0	0	70	1	71	190	2	192
PASSENGER	1005			0			593			1598		
	97.6%			#DIV/0!			97.4%			97.5%		
TRUCK	25			0			16			41		
	2.4%			#DIV/0!			2.6%			2.5%		
BOTH	1030			0			609			1639		
	62.8%			0.0%			37.2%			100.0%		

DIRECTION OF TRAVEL : SOUTHBOUND

HOUR	LEFT			THROUGH			RIGHT			TOTAL		
AM TIME PERIOD	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH
6:00 AM - 7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
PM TIME PERIOD	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH
4:00 PM - 5:00 PM	0	0	0	0	0	0	1	0	1	1	0	1
5:00 PM - 6:00 PM	0	0	0	0	0	0	1	0	1	1	0	1
6:00 PM - 7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
PASSENGER	0			0			2			2		
	#DIV/0!			#DIV/0!			100.0%			100.0%		
TRUCK	0			0			0			0		
	#DIV/0!			#DIV/0!			0.0%			0.0%		
BOTH	0			0			2			2		
	0.0%			0.0%			100.0%			100.0%		

DIRECTION OF TRAVEL : EASTBOUND

HOUR	LEFT			THROUGH			RIGHT			TOTAL		
AM TIME PERIOD	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH
6:00 AM - 7:00 AM	0	0	0	83	1	84	101	1	102	184	2	186
7:00 AM - 8:00 AM	0	0	0	436	15	451	300	6	306	736	21	757
8:00 AM - 9:00 AM	0	0	0	196	9	205	120	5	125	316	14	330
PM TIME PERIOD	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH
4:00 PM - 5:00 PM	0	0	0	299	2	301	142	8	150	441	10	451
5:00 PM - 6:00 PM	2	0	2	600	8	608	288	2	290	890	10	900
6:00 PM - 7:00 PM	0	0	0	211	2	213	127	0	127	338	2	340
PASSENGER	2			1825			1078			2905		
	100.0%			98.0%			98.0%			98.0%		
TRUCK	0			37			22			59		
	0.0%			2.0%			2.0%			2.0%		
BOTH	2			1862			1100			2964		
	0.1%			62.8%			37.1%			100.0%		

DIRECTION OF TRAVEL : WESTBOUND

HOUR	LEFT			THROUGH			RIGHT			TOTAL		
AM TIME PERIOD	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH
6:00 AM - 7:00 AM	30	1	31	71	2	73	0	0	0	101	3	104
7:00 AM - 8:00 AM	152	5	157	230	10	240	0	0	0	382	15	397
8:00 AM - 9:00 AM	74	2	76	145	6	151	1	0	1	220	8	228
PM TIME PERIOD	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH
4:00 PM - 5:00 PM	73	1	74	275	4	279	0	0	0	348	5	353
5:00 PM - 6:00 PM	149	3	152	576	8	584	0	0	0	725	11	736
6:00 PM - 7:00 PM	42	2	44	211	2	213	0	0	0	253	4	257
PASSENGER	520			1508			1			2029		
	97.4%			97.9%			100.0%			97.8%		
TRUCK	14			32			0			46		
	2.6%			2.1%			0.0%			2.2%		
BOTH	534			1540			1			2075		
	25.7%			74.2%			0.0%			100.0%		

Release 11-18-04

A&F ENGINEERING
Transportation & Site Engineering

Proposed Mixed-Use Development
3rd Street & Patterson Drive – Bloomington, Indiana

Patterson Drive & Isaac Drive

Traffic Volume Counts

A & F ENGINEERING CO., LLC
TRAFFIC VOLUME SUMMARY

CLIENT : Bynum Fanyo
INTERSECTION : Patterson Drive & Isaac
DATE : 11/17/2016
COUNTED BY : Miovision

TOTAL VEHICLES (PASSENGER CARS + TRUCKS)

	AM PEAK HOUR VOLUMES BEGINS 7:30 AM				OFF PEAK HOUR VOLUMES BEGINS				PM PEAK HOUR VOLUMES BEGINS 4:30 PM			
	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL
NORTHBOUND	19	354	45	**418**					4	478	17	**499**
SOUTHBOUND	53	439	26	**518**					15	423	7	**445**
EASTBOUND	3	0	0	**3**					3	3	0	**6**
WESTBOUND	24	1	27	**52**					26	6	114	**146**

PEAK HOUR FACTOR

	AM PEAK HOUR FACTOR		OFF PEAK HOUR FACTOR		PM PEAK HOUR FACTOR	
	APPROACH	INTERSECTION	APPROACH	INTERSECTION	APPROACH	INTERSECTION
NORTHBOUND	0.85	0.86			0.87	0.96
SOUTHBOUND	0.80				0.90	
EASTBOUND	0.38				0.75	
WESTBOUND	0.81				0.79	

TRUCK PERCENTAGE

	AM PEAK HOUR PERCENTAGE				OFF PEAK HOUR PERCENTAGE				PM PEAK HOUR PERCENTAGE			
	L	T	R	TOTAL	L	T	R	TOTAL	L	T	R	TOTAL
NORTHBOUND	0.0%	3.4%	4.4%	3.3%					0.0%	1.3%	0.0%	1.2%
SOUTHBOUND	3.8%	3.4%	0.0%	3.3%					6.7%	2.1%	0.0%	2.2%
EASTBOUND	0.0%	0.0%	0.0%	0.0%					0.0%	33.3%	0.0%	16.7%
WESTBOUND	0.0%	100.0%	7.4%	5.8%					0.0%	0.0%	1.8%	1.4%

HOURLY SUMMARY

HOUR			NB	SB	NB+SB	EB	WB	EB+WB	TOTAL
6:00 AM	TO	7:00 AM	100	130	230	0	14	14	244
7:00 AM	TO	8:00 AM	360	473	833	2	41	43	876
8:00 AM	TO	9:00 AM	196	207	403	2	31	33	436
4:00 PM	TO	5:00 PM	264	210	474	4	78	82	556
5:00 PM	TO	6:00 PM	449	435	884	3	119	122	1006
6:00 PM	TO	7:00 PM	191	167	358	4	21	25	383
TOTAL VOLUME			1560	1622	3182	15	304	319	3501
PERCENTAGE			44.6%	46.3%	90.9%	0.4%	8.7%	9.1%	100.0%

A & F ENGINEERING CO., LLC
TRAFFIC VOLUME SUMMARY

CLIENT : Bynum Fanyo
INTERSECTION : Patterson Drive & Isaac
DATE : 11/17/2016

DIRECTION OF TRAVEL : NORTHBOUND

HOUR	LEFT			THROUGH			RIGHT			TOTAL		
AM TIME PERIOD	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH
6:00 AM - 7:00 AM	0	0	0	81	4	85	15	0	15	96	4	100
7:00 AM - 8:00 AM	15	0	15	293	15	308	35	2	37	343	17	360
8:00 AM - 9:00 AM	7	0	7	165	5	170	19	0	19	191	5	196
PM TIME PERIOD	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH
4:00 PM - 5:00 PM	1	0	1	250	4	254	9	0	9	260	4	264
5:00 PM - 6:00 PM	5	0	5	423	3	426	18	0	18	446	3	449
6:00 PM - 7:00 PM	7	0	7	174	2	176	8	0	8	189	2	191
PASSENGER	35			1386			104			1525		
	100.0%			97.7%			98.1%			97.8%		
TRUCK	0			33			2			35		
	0.0%			2.3%			1.9%			2.2%		
BOTH	35			1419			106			1560		
	2.2%			91.0%			6.8%			100.0%		

DIRECTION OF TRAVEL : SOUTHBOUND

HOUR	LEFT			THROUGH			RIGHT			TOTAL		
AM TIME PERIOD	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH
6:00 AM - 7:00 AM	7	0	7	122	0	122	1	0	1	130	0	130
7:00 AM - 8:00 AM	42	1	43	402	10	412	18	0	18	462	11	473
8:00 AM - 9:00 AM	18	1	19	171	8	179	9	0	9	198	9	207
PM TIME PERIOD	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH
4:00 PM - 5:00 PM	5	1	6	194	7	201	3	0	3	202	8	210
5:00 PM - 6:00 PM	16	0	16	406	3	409	10	0	10	432	3	435
6:00 PM - 7:00 PM	2	1	3	157	2	159	5	0	5	164	3	167
PASSENGER	90			1452			46			1588		
	95.7%			98.0%			100.0%			97.9%		
TRUCK	4			30			0			34		
	4.3%			2.0%			0.0%			2.1%		
BOTH	94			1482			46			1622		
	5.8%			91.4%			2.8%			100.0%		

DIRECTION OF TRAVEL : EASTBOUND

HOUR	LEFT			THROUGH			RIGHT			TOTAL		
AM TIME PERIOD	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH
6:00 AM - 7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM - 8:00 AM	2	0	2	0	0	0	0	0	0	2	0	2
8:00 AM - 9:00 AM	2	0	2	0	0	0	0	0	0	2	0	2
PM TIME PERIOD	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH
4:00 PM - 5:00 PM	3	0	3	1	0	1	0	0	0	4	0	4
5:00 PM - 6:00 PM	0	1	1	1	1	2	0	0	0	1	2	3
6:00 PM - 7:00 PM	3	0	3	1	0	1	0	0	0	4	0	4
PASSENGER	10			3			0			13		
	90.9%			75.0%			#DIV/0!			86.7%		
TRUCK	1			1			0			2		
	9.1%			25.0%			#DIV/0!			13.3%		
BOTH	11			4			0			15		
	73.3%			26.7%			0.0%			100.0%		

DIRECTION OF TRAVEL : WESTBOUND

HOUR	LEFT			THROUGH			RIGHT			TOTAL		
AM TIME PERIOD	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH
6:00 AM - 7:00 AM	9	0	9	0	0	0	5	0	5	14	0	14
7:00 AM - 8:00 AM	17	0	17	0	0	0	22	2	24	39	2	41
8:00 AM - 9:00 AM	15	0	15	0	1	1	14	1	15	29	2	31
PM TIME PERIOD	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH	PASS	TRUCK	BOTH
4:00 PM - 5:00 PM	14	0	14	4	0	4	59	1	60	77	1	78
5:00 PM - 6:00 PM	28	0	28	2	0	2	86	3	89	116	3	119
6:00 PM - 7:00 PM	8	0	8	0	0	0	13	0	13	21	0	21
PASSENGER	91			6			199			296		
	100.0%			85.7%			96.6%			97.4%		
TRUCK	0			1			7			8		
	0.0%			14.3%			3.4%			2.6%		
BOTH	91			7			206			304		
	29.9%			2.3%			67.8%			100.0%		

Release 11-18-04

3RD STREET & WESTPLEX DRIVE

CAPACITY ANALYSIS
QUEUE LENGTH ANALYSIS

HCM 2010 TWSC
3:

Proposed AM
12/06/2016

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	802	31	19	481	28	51	0	31	12	0	12
Future Vol, veh/h	13	802	31	19	481	28	51	0	31	12	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	3	1	1	3	0	1	0	1	1	0	1
Mvmt Flow	15	933	36	22	559	33	59	0	36	14	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	592	0	0	969	0	0	1305	1617	484	1117	1619	296
Stage 1	-	-	-	-	-	-	981	981	-	620	620	-
Stage 2	-	-	-	-	-	-	324	636	-	497	999	-
Critical Hdwy	4.1	-	-	4.12	-	-	7.52	6.5	6.92	7.52	6.5	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.5	-	6.52	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.5	-	6.52	5.5	-
Follow-up Hdwy	2.2	-	-	2.21	-	-	3.51	4	3.31	3.51	4	3.31
Pot Cap-1 Maneuver	994	-	-	713	-	-	119	105	531	163	104	703
Stage 1	-	-	-	-	-	-	270	330	-	445	483	-
Stage 2	-	-	-	-	-	-	665	475	-	526	324	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	994	-	-	713	-	-	113	100	531	147	99	703
Mov Cap-2 Maneuver	-	-	-	-	-	-	113	100	-	147	99	-
Stage 1	-	-	-	-	-	-	266	325	-	438	468	-
Stage 2	-	-	-	-	-	-	632	460	-	483	319	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.4	46.7	21.1
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	113	531	994	-	-	713	-	-	147	703
HCM Lane V/C Ratio	0.525	0.068	0.015	-	-	0.031	-	-	0.095	0.02
HCM Control Delay (s)	67.6	12.3	8.7	-	-	10.2	-	-	32	10.2
HCM Lane LOS	F	B	A	-	-	B	-	-	D	B
HCM 95th %tile Q(veh)	2.4	0.2	0	-	-	0.1	-	-	0.3	0.1

HCM 2010 TWSC
3:

Proposed PM
12/06/2016

Intersection												
Int Delay, s/veh	9.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	876	80	46	914	30	70	0	40	21	0	28
Future Vol, veh/h	24	876	80	46	914	30	70	0	40	21	0	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	3	1	1	3	0	1	0	1	1	0	1
Mvmt Flow	25	903	82	47	942	31	72	0	41	22	0	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	973	0	0	986	0	0	1560	2062	493	1554	2088	487
Stage 1	-	-	-	-	-	-	994	994	-	1053	1053	-
Stage 2	-	-	-	-	-	-	566	1068	-	501	1035	-
Critical Hdwy	4.1	-	-	4.12	-	-	7.52	6.5	6.92	7.52	6.5	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.5	-	6.52	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.5	-	6.52	5.5	-
Follow-up Hdwy	2.2	-	-	2.21	-	-	3.51	4	3.31	3.51	4	3.31
Pot Cap-1 Maneuver	717	-	-	703	-	-	77	55	524	78	53	529
Stage 1	-	-	-	-	-	-	265	326	-	244	306	-
Stage 2	-	-	-	-	-	-	479	301	-	523	312	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	717	-	-	703	-	-	~ 67	50	524	66	48	529
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 67	50	-	66	48	-
Stage 1	-	-	-	-	-	-	256	315	-	235	286	-
Stage 2	-	-	-	-	-	-	423	281	-	465	301	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.5	156.3	43.1
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	67	524	717	-	-	703	-	-	66	529
HCM Lane V/C Ratio	1.077	0.079	0.035	-	-	0.067	-	-	0.328	0.055
HCM Control Delay (s)	238.4	12.5	10.2	-	-	10.5	-	-	84.2	12.2
HCM Lane LOS	F	B	B	-	-	B	-	-	F	B
HCM 95th %tile Q(veh)	5.5	0.3	0.1	-	-	0.2	-	-	1.2	0.2

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection: 3:

Movement	EB	EB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	L	TR	L	TR
Maximum Queue (ft)	34	2	37	89	44	37	34
Average Queue (ft)	6	0	10	36	21	10	9
95th Queue (ft)	27	2	34	72	45	33	31
Link Distance (ft)	761	761	1086	538	538	365	365
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3:

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	44	18	63	2	6	218	49	61	47
Average Queue (ft)	15	1	24	0	0	108	25	20	19
95th Queue (ft)	41	10	54	2	4	267	46	50	44
Link Distance (ft)	761	761	1086	1086	1086	538	538	365	365
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)									
Storage Blk Time (%)									
Queuing Penalty (veh)									

Network Summary

Network wide Queuing Penalty: 0

85

James Roach <roachja@bloomington.in.gov>

Fwd: Patterson Point development...

Andrew Cibor <cibora@bloomington.in.gov> Fri, Jan 6, 2017 at 10:07 AM
To: James Roach <roachja@bloomington.in.gov>

---------- Forwarded message ----------
From: **Wolfgang von Buchler** <wolfamsea@hotmail.com>
Date: Fri, Jan 6, 2017 at 9:59 AM
Subject: Patterson Point development...
To: "cibora@bloomington.in.gov" <cibora@bloomington.in.gov>, Wolfgang von Buchler <wolfamsea@hotmail.com>

Dear Mr. Cibor and Bloomington Plan Commission:

I am sorry that I can not be at this meeting in person. So I am sending my thoughts to be shared with you.

Please include the parking boulevard off of W. 3rd St. , when approving the Patterson Point development. I drive this stretch daily, and there is, in my opinion, no way that folks will be able to back out onto Third St. much of the day. Traffic going east backs up at the stop light at Patterson and Third. So how can people back out?? It is already a congested area. And, no, people will not "pay more attention", if parking is added.

If you are going to consider "long term possibilities" (quote from Mr. Neher) then adding a right turn lane in the east bound part of Third St., west of Patterson, would be a step in the right direction.

But please, no angle parking off east bound Third St. Leave the boulevard in the plan.

Thank you, Sincerely,

Wolfgang von Buchler 812 825 1925 5576 W. Cobblestone St. / Bloomington

BLOOMINGTON PLAN COMMISSION **CASE #: SP-39-16**
STAFF REPORT **DATE: January 9, 2016**
Location: 424 E. 6th Street & 426 E. 6th Street

PETITIONER: **Sheree Demming**
505 N. Lakeshore Drive #3003 Chicago, IL

CONSULTANT: **Doug Bruce, Tabor Bruce Architecture**
110 S. Walnut Street, Bloomington

REQUEST: The petitioner is requesting site plan approval for a 3-story two-unit multi-family building.

Area:	**0.23 Acres**	
Zoning:	**CD/University Village Overlay**	
GPP Designation:	**Downtown**	
Existing Land Use:	**Dwelling, Multifamily**	
Proposed Land Use:	**Dwelling, multifamily**	
Surrounding Uses:	**North**	– Parking Garage
	East	– Commercial / Parking Lot
	South	– Commercial / Dwelling, Multifamily
	West	– Dwelling, Multifamily

STAFF REPORT: The property is located on the south side of 6th Street between Grant and Dunn Streets. This 0.23 acre property is zoned Commercial Downtown (CD) and is within the University Village Overlay (UVO). The property is two parcels and currently contains two existing single-family structures, each with five bedrooms. The parcels together are reviewed as one zoning lot. Both structures on the property and the structure on the adjacent property to the west are listed as contributing in the 2015 Historic Sites and Structures Inventory. Surrounding land uses include single-family rentals to the west, commercial on Kirkwood Avenue to the south, the site of the recently approved future multi-family and Bloomington Bagel store to the immediate east with an IU parking lot across Dunn Street, and a parking garage to the north.

The petitioner proposes to add a 3-story building containing two townhouses on the south side of the 424 E. 6th Street parcel. The building would not have direct frontage on any street, but would be near the alley. The proposed building would contain one 4-bedroom unit and one 5-bedroom unit. Five parking spaces are proposed on the south side of the building, and would back out onto the alley. Each unit would have a separate pedestrian entrance on the east side of the building. A back stairwell on the existing house at 424 would be reoriented with the proposal and no changes would be made to the other existing house.

The petitioner is expecting to meet most site plan requirements, including height, density, architectural materials, parking, impervious surface coverage, and setbacks. A waiver is required for residential on the first floor because the site abuts Dunn Street, even though the new building in this petition does not front` on Dunn. Waivers are also required for the design of the upper story windows.

A letter of remonstrance was received late in the staff review process. It appears that the issues raised are not site plan related, but of a legal nature. Staff will research the issue before the hearing.

Plan Commission Site Plan Review: Two aspects of this project require that the petition be reviewed by the Plan Commission, per BMC 20.03.160. These aspects are as follows:

- The proposal is adjacent to a residential use.
- The petitioner is requesting waivers to one standard in 20.03.019 and two standards in BMC 20.03.200.

SITE PLAN ISSUES:

Residential Density: The existing buildings each contain five bedrooms. This proposal would add one 4-bedroom unit and one 5-bedroom unit for a total of 7.5 DUEs. The maximum residential density allowed in the UVO is 33 units/acre. The petition property is .23 acres in size. The maximum allowable density on the property is 7.59 DUEs. The proposal meets residential density requirements.

Parking: There are ten existing bedrooms on the property, requiring no parking. The additional 9 bedrooms require 5 spaces, which are provided.

Impervious Surface: Proposed is 60% impervious surface, which complies with the maximum of 85% allowed in the UVO.

Access: Vehicle access to the parking spaces for the new units will be derived from the adjacent alley to the south. The 5 parking spaces will back out into the alley. Pedestrian access to each unit will be on the east side of the building. Staff has asked the petitioner to incorporate a pedestrian sidewalk to either Dunn or 6th Street, whichever street is chosen for addressing. An existing vehicular access on Dunn Street will closed.

Bicycle Parking: The total number of bicycle parking spaces required for this development is four spaces. Bicycle parking space location needs to be provided. A condition has been included.

Architecture/Materials: The building has been designed in a modern style. The proposed architecture includes a material that will look like cement board siding of different sized panels. While staff is slightly uncertain about the larger panels shown in the schematics, as long as they are not EIFS, vinyl, metal, highly reflective, or smooth or split-faced cement block, they are permitted. The building will have a flat-roof design with a parapet.

Windows: The building does not front on a street, so typical first floor window requirements do not apply. However, Upper Story Window requirements do apply. The building has a modern design and does not meet the 1:1.5 width to height required window ratio or the sill and lintel requirements. Waivers are required for both issues.

Upper Story Window Ratio Waivers-20.03.200(b)(3)(C)(i) and 20.03.200(b)(3)(C)(ii): The window design guidance in the UDO is to help provide uniformity and relate new buildings to the many historic structures in the UVO along the street frontages. The proposed building does not have frontage on a roadway and does not have historic structures that are immediately adjacent on the public alley. Views of the building from both 6th Street and Dunn Street will be limited. The building has been designed to relate to the approved modern building on the Bloomington Bagel Co. parcel immediately to the east. Staff supports both window design waivers.

Step Down: BMC 20.03.200(c)(2) requires that buildings located to the side of a surveyed historic structure not be more than one story taller, or 14 feet taller, than the surveyed structure. While the proposed building is not on a street and does not have a historic structure to the side of it on the alley, the two-story building on the same parcel is listed as contributing in the survey. No portion of the proposed building is more than 14 feet taller than the adjacent building.

Landscaping: The proposal will meet UDO requirements, which includes 5 street trees. A condition has been included.

Streetscape: The new building will not have frontage on any streets, only the alley, but streetscape improvements are required because the zoning lot has frontage on 6th Street and Dunn Street. There are two existing trees on 6th Street that can count toward the five trees required meet the UDO street tree requirement for this proposal. Street lighting is required. Staff thinks that one light at the corner of 6th and Dunn is appropriate. Petitioner must seek a staff level right-of-way encroachment agreement approval for the street lighting and bike racks if they are placed in the right-of-way.

Utilities: The petitioner has submitted a utility plan to the City Utilities Department and this plan is under review. Utility service is adequate in the area. An electric pole will need to be moved if the project is approved, and the petitioner is working with Duke Energy.

Residential Uses on the Ground Floor: In the UVO, particular streets are designated for inclusion of non-residential uses on the ground floor. Dunn Street is one of those roads. Because the property with frontage on Dunn Street is part of the zoning lot in this petition, the petition technically needs to provide no less than 50% of the ground floor area fronting on Dunn Street for non-residential uses. A waiver from this standard is required.

Ground Floor Non-Residential Uses Waiver-20.03.190(e)(2): The stipulation for ground floor non-residential uses in included in the UVO to encourage continued non-residential uses in the area in new development. The proposed development will be making no changes to the building with frontage along Dunn Street, which is currently occupied by a residential use. The proposed building does not have frontage on Dunn Street. Staff is supportive of this waiver.

ENVIRONMENTAL COMMISSION RECOMMENDATIONS: The Bloomington Environmental Commission (EC) has made 2 recommendations concerning this development.

1.) The petitioner should allocate space for recyclable-materials collection, which will reduce the building's carbon footprint and promote healthy indoor and outdoor environments. Recycling is an important contributor to Bloomington's environmental quality and is expected in a 21st-century structure.

Staff Response: Staff encourages petitioner to allow space for recycling collection. It is not required per UDO standards at this time.

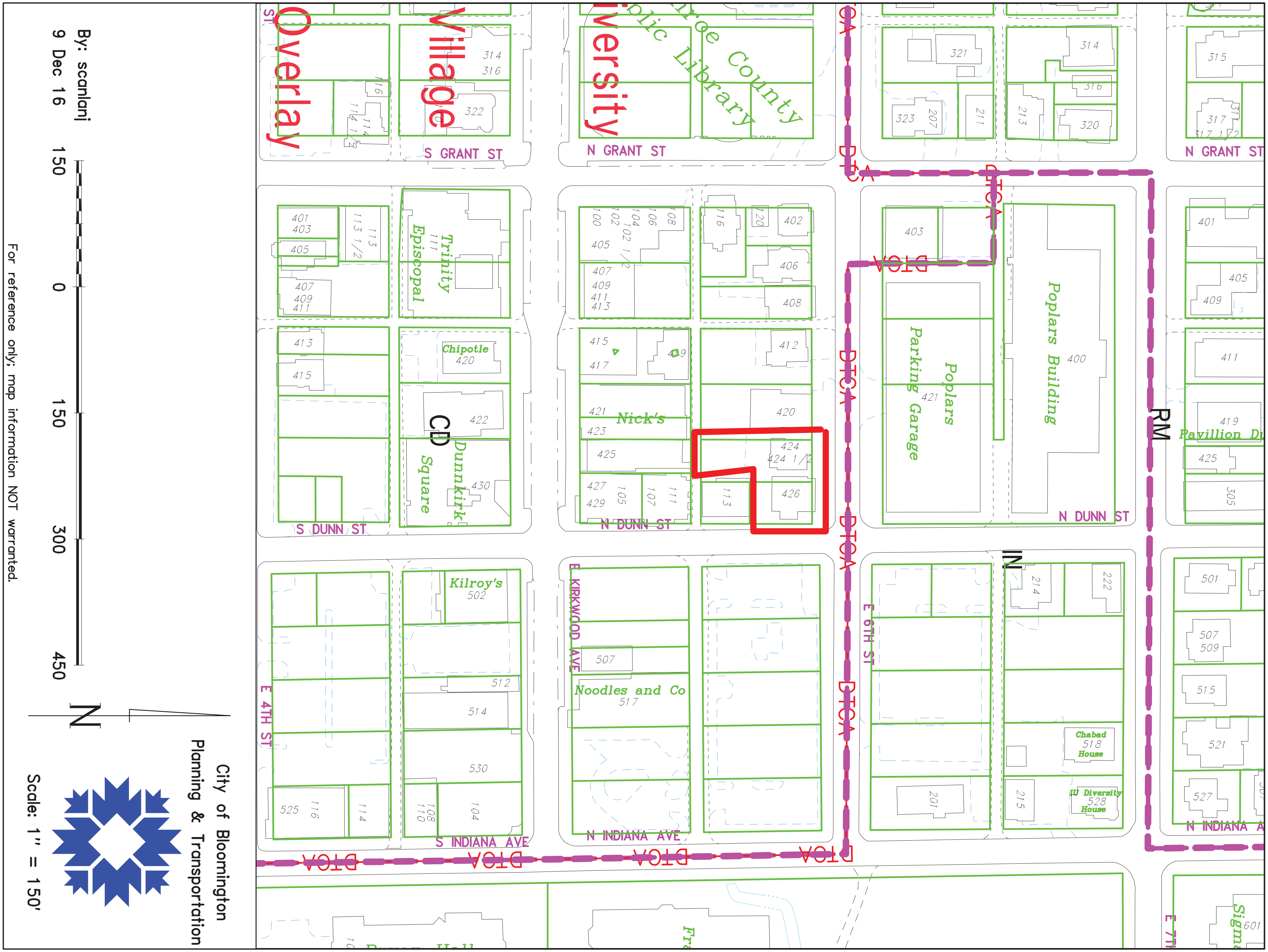
2.) The Petitioner should apply green building and site design practices to create a high performance, low-carbon footprint structure.

Staff Response: Staff encourages the petitioner to pursue green building practices. It is not required per UDO standards at this time.

CONCLUSION: The Planning Department staff finds that the proposed building meets use, density, architectural materials, parking, impervious surface coverage, setback, and height requirements. While some modern designs have been incorporated, staff believes that the intentions of the UVO have been met on a building that has no roadway frontage.

RECOMMENDATION: Staff recommends approval of SP-39-16 with the following conditions:

1. Petitioner must receive staff level right-of-way encroachment approval for the required street light and bike racks (if not located on the property), and must install them before final occupancy will be issued.
2. Petitioner shall amend the site plan to add the required four bicycle parking spaces before a grading permit will be issued.
3. Petitioner shall amend the site plan to meet landscaping requirements before a grading permit will be issued.
4. Petitioner shall work with staff on the best location for a sidewalk connecting the new building to either 6th Street or Dunn Street. Address signage shall be added at the intersection of the sidewalk and street.


By: scanlanj
9 Dec 16
For reference only; map information NOT warranted.
City of Bloomington
Planning & Transportation
Scale: 1" = 150'
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300
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E 4TH ST
E 6TH ST
E 7TH ST
Trinity Episcopal
Chipotle
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Dunnkirk Square
Nick's
Kilroy's
502
Noodles and Co
517
Poplars Parking Garage
421
Poplars Building
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Pavillion
Chabad
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House
IU Diversity
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Monroe County Public Library
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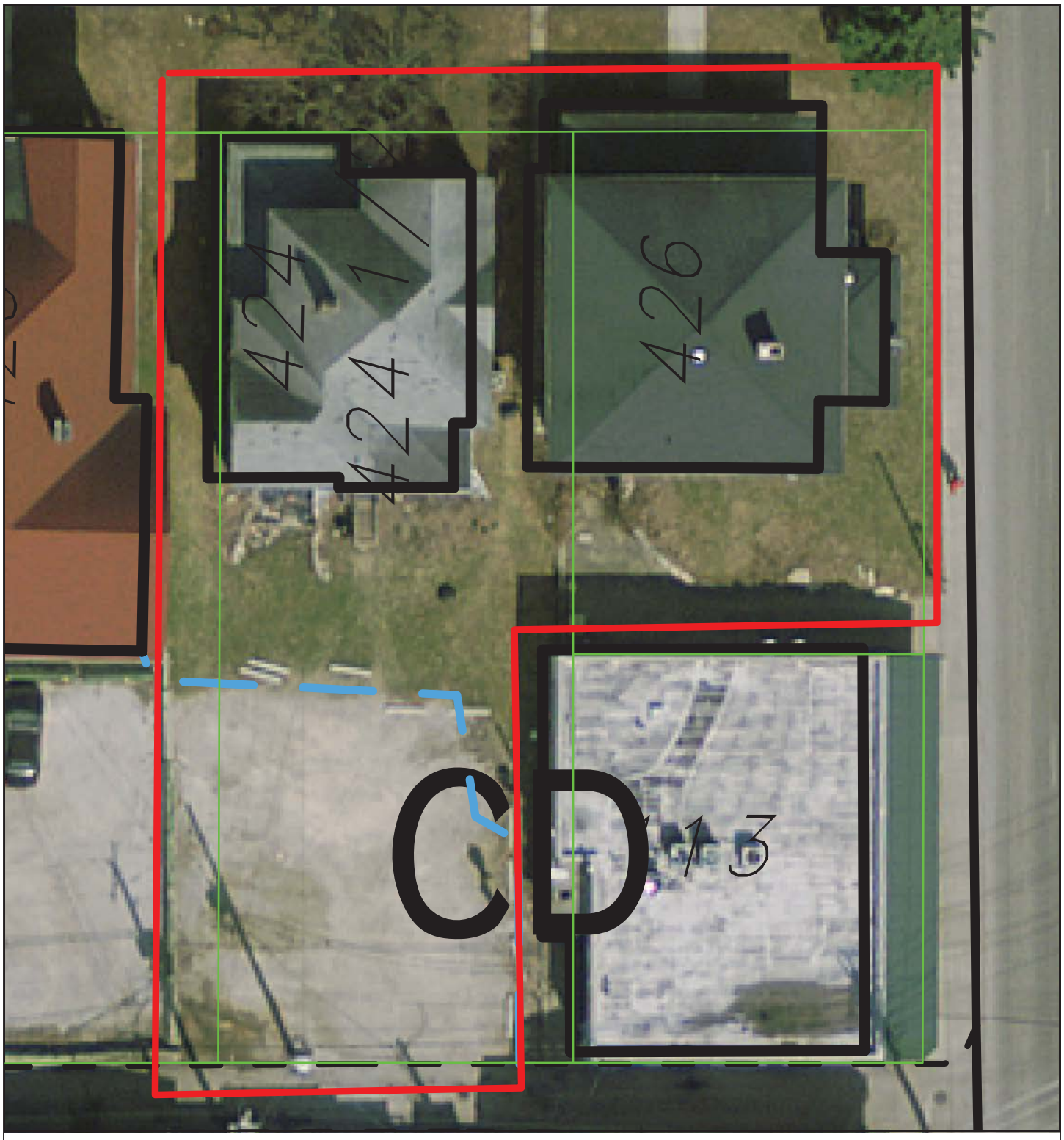

City of Bloomington
Planning & Transportation

By: scanlanj
9 Dec 16

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Scale: 1" = 20'

For reference only; map information NOT warranted.

TABOR BRUCE ARCHITECTURE & DESIGN

SP-39-16 Petitioner's Statement

BLOOMINGTON PLAN COMISSION

Petitioner's Statement

Concerning the petition of Sheree Demming for the purpose of consideration of her petition for the property located at 424 East 6th Street, Bloomington, Indiana.

Location
The project site is located along an alley which is the south side of a .16 acre site within the University Village overlay zone on a currently vacant gravel lot that contains an existing two story rental house. Combined, the two properties owned is .25 acres.

Background
We are proposing to build a two unit town home structure on the southern portion of the existing gravel lot that abuts the adjacent alley. Currently, there is a 2,352 Square foot, two story rental house with 5 bedrooms on this large lot. The petitioner also owns an existing structure on an adjacent lot to the east that is two stories of 2,745 square feet with 5 bedrooms.

Immediately, to the east of this gravel lot is the Bloomington Bagel Company and to the west, is another gravel parking lot, surrounded by concrete road dividers. The existing area of this site is a gravel parking lot that the city wishes the petitioner to pave with asphalt if a project is not constructed; the petitioner has wished to develop a structure on this lot, so paving the lot, only to tear up the paving for a building did not seem prudent.

Design
The petitioner wanted a forward looking modern design that would provide a contrast to the existing residential structures to the north, that would also update and improve the dirty, seemingly delivery truck prone, forgotten alley. Meetings with the director of the Historic Preservation Commission, we discussed a direction towards creating a more modern design of this structure that would contrast with the large, existing, historic listed structures nearby. This site faces the rear of existing buildings who face Kirkwood Ave and are visually designed as not pedestrian friendly.

The design presented is inspired by the need to maximize the available space of the small lot, and create a visually interesting structure in an alley of disinterest and disarray. The low slope shingle roof is hidden behind the parapet walls to give the building a more commercial look, and

materials are selected to give texture and scale to simple walls. The entry for the two units is located towards the east with walks and an area for landscaping that will define the entry as well as keep people from walking thru the site in droves as they do now.

The building was designed keeping in mind the goals of the University Village Overlay zone which states:

"Promote infill **and redevelopment of sites using moderate residential densities** for the University Village area and high residential densities along the Kirkwood Corridor"
We believe this proposal is ideally positioned to meet this objective as part of the Kirkwood corridor. This infill development allows for residential uses within our city's core where development is best served by not only existing infrastructure but by public transportation.

The design also considered the restrictions set forth as follows in the zone:
1. Due allowed 33 per acre-both sites =.25 acres with 8.25 DUEs allowed, 7.50 DUEs provided.
2. Required parking, 5 spaces and 5 spaces are provided. (9 new bedrooms added)
3. Impervious surface allowed 85%, % provided.
4. 40 feet maximum height allowed, 34 feet height provided.

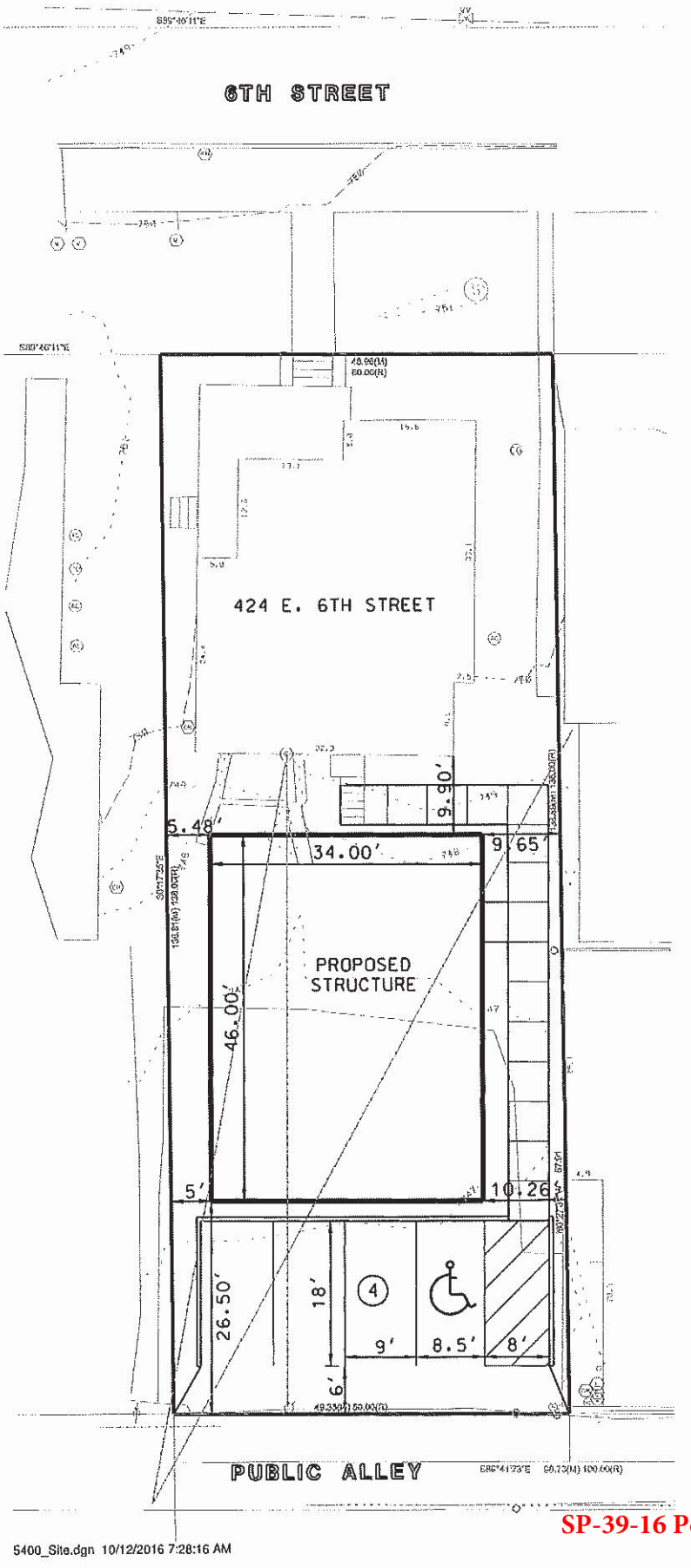
Access & Parking
The primary pedestrian entry to the units will be from the East side, where we set back 10 feet from the property line. Parking Is required of 4.5 spaces and 5 spaces are provided and set back from the alley with room to back in and out of.

We believe this project will be an attractive improvement to this area and perfectly scaled as an expected development in our downtown where density belongs and does not contribute to sprawl. We believe this petition will clean up an alley that already has a great deal of pedestrian traffic and whose impact will barely be visible from the street. This alley has become a walk able alley, almost a street front in itself with the beer garden of Big Woods just down at the west end and Nicks located along the midpoint. It is our hope that this project will clean up the alley and provide a more organized use in a chaotic space.

Thank you for the opportunity to submit the proposed development for review. We look forward to working together on this Development. We kindly ask for your approval of our request.

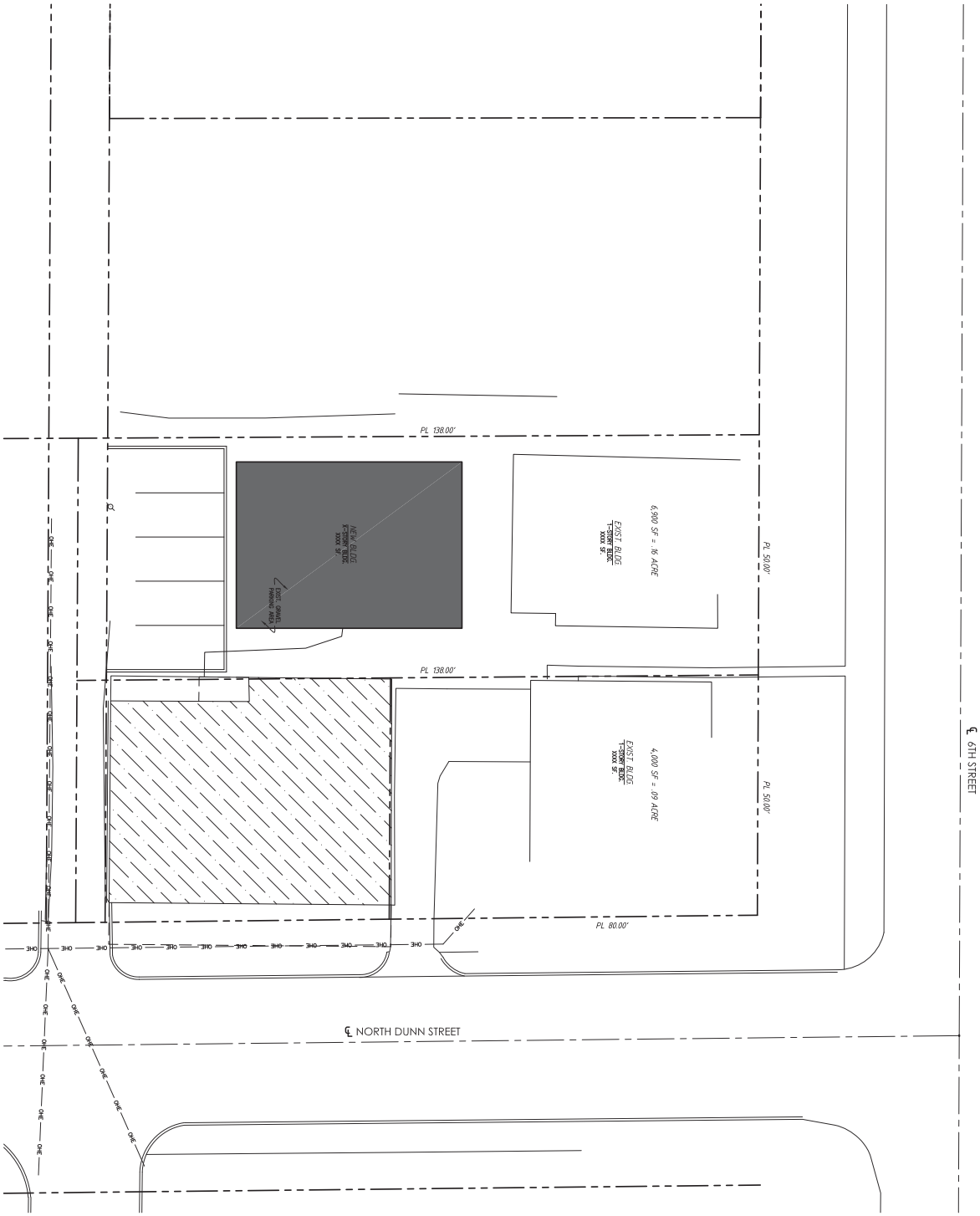
Sincerely,

Doug Bruce
Architect
Tabor/Bruce Architecture & Design



SP-39-16 Petitioner's Site Plan

SP-39-16 Petitioner's Site Plan

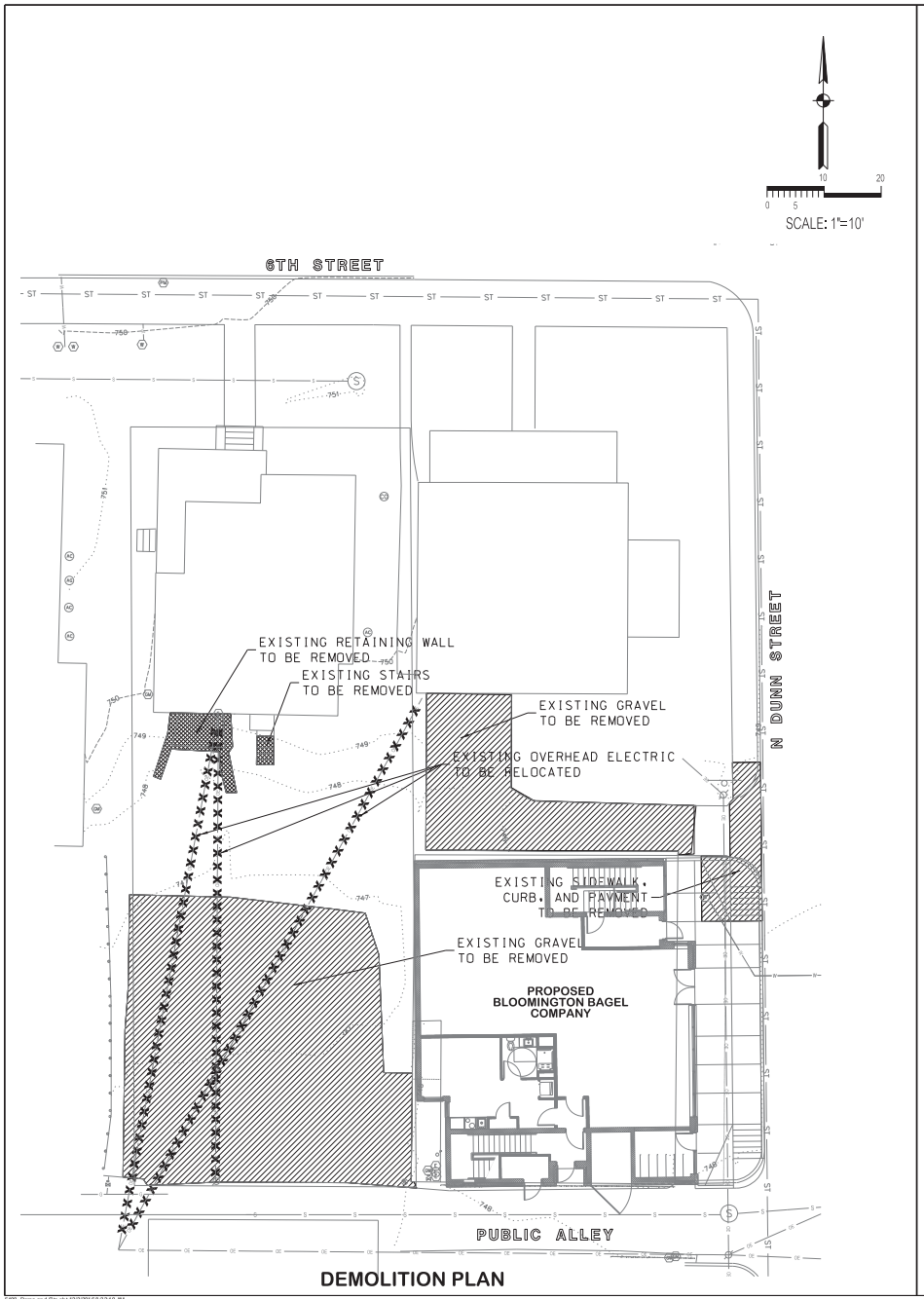


ARCHITECTURAL SITE PLAN
1" = 10'

SCHEMATIC SITE PLAN

PROJECT NAME: DEMMING PROPERTY
PROJECT LOCATION: 424 EAST 6TH STREET
DESIGN PHASE: CONCEPT PLANNING
DATE: 12.01.16
DRAWING SCALE: 1"=10'

TABOR BRUCE
ARCHITECTURE & DESIGN INC.



DEMOLITION PLAN

SITE LEGEND

DRAINAGE EASEMENT	10'DE
UTILITY EASEMENT	10'UE
DR. & UT. EASEMENT	10'D&UE
2' ROLL CURB	
2' CURB AND GUTTER	
6" STANDING CURB	
CONCRETE SIDEWALK	
HANDICAPPED RAMP	
HANDICAPPED RAILING	
RET. WALL (CONCRETE)	
RET. WALL (MASONRY)	
RET. WALL (STONE)	
RET. WALL (WOOD)	
FENCE (BARB WIRE)	
FENCE (CHAIN LINK)	
FENCE (SMOOTH WIRE)	
FENCE (POST & RAIL)	
FENCE (WOOD SLAT)	
GUARD RAIL	
PROPOSED STREET TREE	
BOLLARD	
DUMPSTER (WOOD)	
DUMPSTER (MASONRY)	

GENERAL NOTES

1) SEE SMITH BRCHOB 2014 STANDARD SPECIFICATIONS FOR CONSTRUCTION REQUIREMENTS.
2) TOP OF CASTING ELEVATIONS ARE GIVEN IN THE FOLLOWING LOCATIONS: A) MANHOLES: RIM ELEVATION
   B) INLETS: GUTTER ELEVATION
3) LOCATION OF EXISTING UTILITIES ARE TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR. PLEASE NOTIFY ENGINEER IF FIELD ADJUSTMENTS ARE NECESSARY.

SITE PLAN NOTES

1) SIDEWALK RAMPS SHALL BE IN ACCORDANCE WITH THE LATEST ADA AND CITY OF BLOOMINGTON REQUIREMENTS. CONTRACTOR SHALL COORDINATE WORK WITH CITY ENGINEERING PRIOR TO COMMENCEMENT.
2) PAVEMENT MARKINGS, IF SHOWN, SHALL BE APPLIED IN ACCORDANCE WITH SECTION 808 & 912.14 OF THE 2014 INDOT STANDARD SPECIFICATIONS AND AS SHOWN ON THE PLANS.
3) CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CITY R/W EXCAVATION PERMIT IF WORK WITHIN THE PUBLIC R/W IS NECESSARY FOR THE PROJECT COMPLETION.

MATERIALS LEGEND

(P1) 1" HMA SURFACE ON
3" HMA BASE ON
7" COMPACTED AGGREGATE BASE #53, TYPE "O"

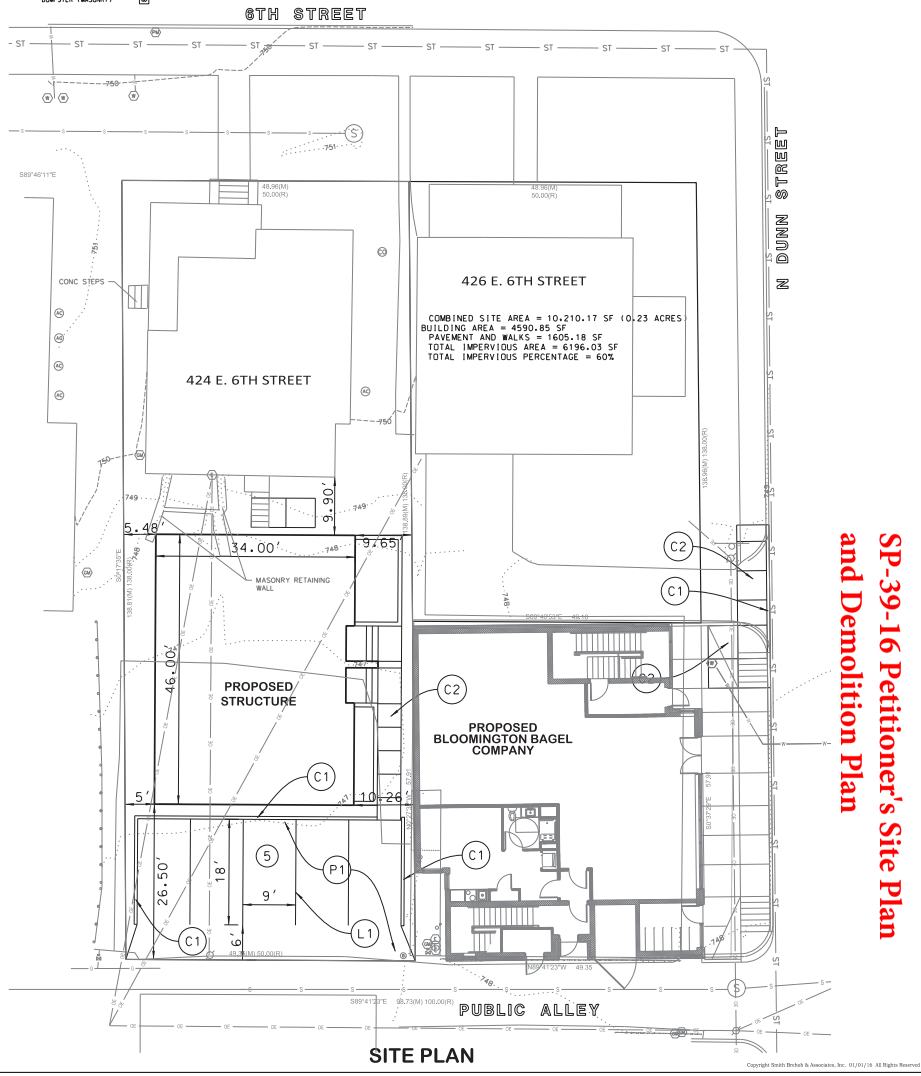
(C1) 6" STANDING CURB

(C2) CONCRETE SIDEWALK - WIDTH VARIES
4" THICK CONCRETE
4" COMPACTED AGGREGATE BASE #53, TYPE "O"

(L1) LINE, PAINT, SOLID, WHITE, 4"

(R1) CURB RAMP TYPE "H"

SCALE: 1"=10'



SITE PLAN

SP-39-16 Petitioner's Site Plan and Demolition Plan

Smith Brchob & Associates, Inc.
333 S. Clarizz Boulevard
Bloomington, Indiana 47401
Telephone: (812) 336-6536
Fax: (812) 336-6513
Web: http://smithbrchob.com

CERTIFICATION DATE
/ /

JOB TITLE
424 E. 6TH STREET
MULTIFAMILY DEVELOPMENT

REVISIONS	BY	DATE

DESIGNED SAB
DRAWN SAB
CHECKED
DATE

JOB NUMBER 5400
SHEET C201
DATE 10/31/16
DEMOLITION AND SITE PLAN

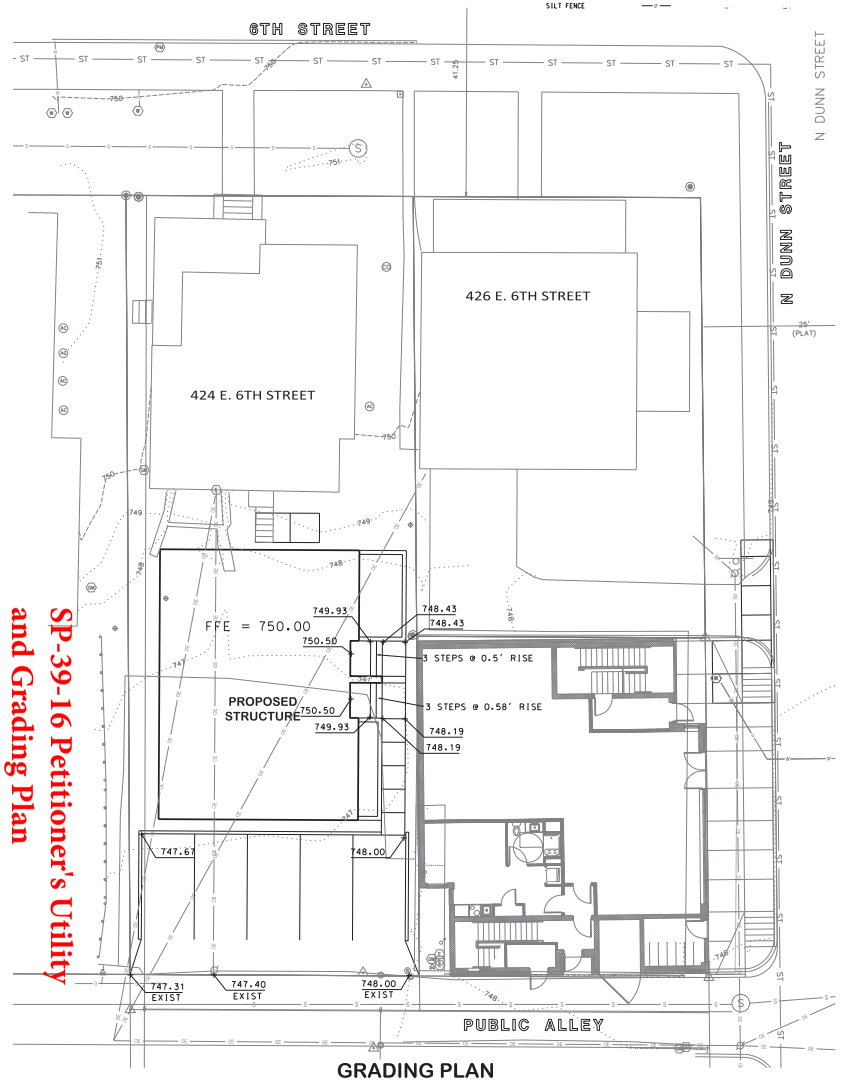
9400_Demo and Site.dwt 10/2/2016 8:22:49 AM

SP-39-16 Petitioner's Utility and Grading Plan

GRADING & EROS. CTRL LEGENDS

PROPOSED 1' CONTOUR
PROPOSED 5' CONTOUR
PROPOSED SPOT ELEVATION
SOIL BORING
RIP-RAP
SILT TRAP
INLET PROTECTION
DETENTION BASIN
STRAW BALE DAM
ROCK CHECK DAM
PAVED SIDE DITCH
DIVERSION DITCH
TREE PROTECTION FENCE
FLOOD LINE
FLOW LINE
GRADING LIMITS
SEDIMENT BASIN
SILT FENCE

SCALE: 1"=10'



GRADING PLAN

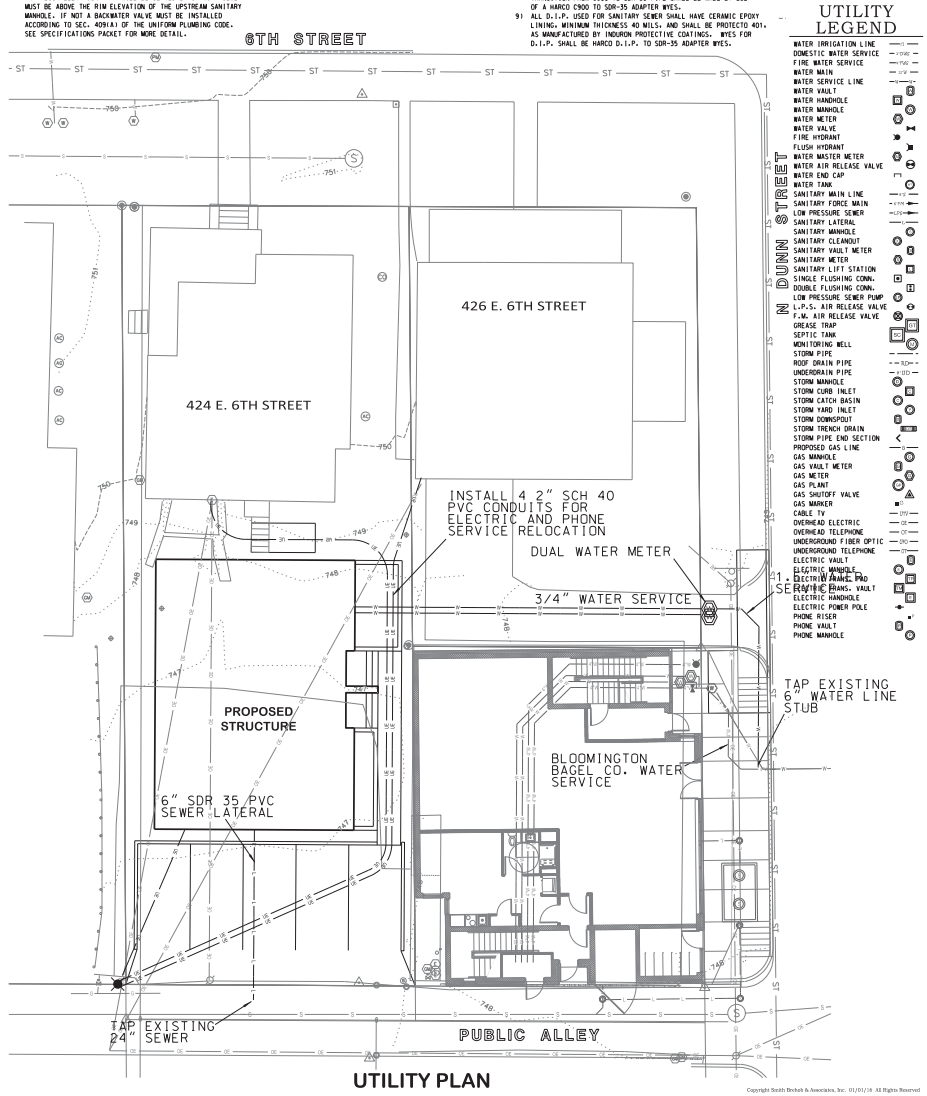
UTILITY NOTES

1) ALL PROJECTS WILL REQUIRE A PRE-CONSTRUCTION MEETING WITH THE CITY OF BLOOMINGTON UTILITIES PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR AND/OR DEVELOPER MUST CONTACT THE UTILITIES TECHNICIAN AT (812) 349-3633 TO SCHEDULE THE MEETING.
2) CONTRACTOR SHALL NOTIFY THE CITY OF BLOOMINGTON UTILITIES ENGINEERING DEPARTMENT ONE (1) WORKING DAY PRIOR TO CONSTRUCTION OF ANY WATER, STORM OR SANITARY SEWER UTILITY WORK. A CBU INSPECTOR MUST HAVE NOTICE SO WORK CAN BE INSPECTED, DOCUMENTED, AND A PROPER AS-BUILT MADE. WHEN A CONTRACTOR WORKS ON WEEKENDS, A CBU DESIGNATED HOLIDAY, OR BEYOND NORMAL CBU WORK HOURS, THE CONTRACTOR WILL PAY FOR THE INSPECTOR'S OVERTIME. FOR CBU WORK HOURS AND HOLIDAY INFORMATION, PLEASE CONTACT THE CITY OF BLOOMINGTON UTILITIES ENGINEERING DEPARTMENT AT (812)349-3660.
3) SEE SPECIFICATIONS FOR SIZES OF WATER SERVICE LINES AND SEWER LATERALS NOT SPECIFICALLY NOTED ON THE PLANS.
4) MS.=I IF SHOWN ON THE PLANS, = MINIMUM SEWER ELEVATION. IT INDICATES THE LOWEST FLOOR ELEVATION THAT WILL ALLOW GRAVITY SEWER SERVICE WITHOUT A SPECIAL BACKWATER VALVE. ANY FLOOR ELEVATION THAT WILL BE SERVED BY GRAVITY SEWER MUST BE ABOVE THE RIM ELEVATION OF THE UPSTREAM SANITARY MANHOLE. IF NOT A BACKWATER VALVE MUST BE INSTALLED ACCORDING TO SEC. 409.A.I OF THE UNIFORM PLUMBING CODE. SEE SPECIFICATIONS PACKET FOR MORE DETAIL.
5) ON ALL EXISTING SANITARY MAINS, WYES SHALL BE CUT AND SLEEVED IN PLACE BY CITY OF BLOOMINGTON UTILITIES PERSONNEL WITH CITY OF BLOOMINGTON UTILITIES FURNISHING ALL MATERIAL, EQUIPMENT, AND LABOR NECESSARY FOR INSTALLATION. DEVELOPER SHALL PROVIDE ALL NECESSARY EXCAVATION, SHORING, BACKFILL, AND SURFACE REPAIR. PLEASE CONTACT NANCY AXSOM AT (812) 349-3689 FOR MORE INFORMATION.
6) WHEN CONNECTING A NEW PIPE TO AN EXISTING MANHOLE, THE MANHOLE SHALL BE CORE-DRILLED. PIPE SHALL BE CONNECTED TO THE MANHOLE BY EITHER A FLEXIBLE BOOT KOR-N-SEAL 1 OR 2 FLEXIBLE CONNECTOR OR APPROVED EQUAL. TABLE AND TROUGH SHALL BE MODIFIED AS NECESSARY TO DIRECT THE FLOW FROM THE NEW PIPE. INVERT OF CONNECTION SHALL BE NO MORE THAN ONE FOOT HIGHER THAN THE INVERT OUT FOR THIS STRUCTURE.
7) IN ACCORDANCE WITH SECTION 4.5.2.1.5.1. OF THE CBU CONSTRUCTION SPECIFICATIONS ALL SEWER LATERALS SHALL HAVE A CLEAN-OUT AT LEAST EVERY 90 FEET. ALL CLEAN-OUTS, WEATHER IN GRASSY AREAS OR IN PAVEMENT, SHALL BE SUB-SURFACE AND PROTECTED BY A SUITABLE METAL CASTING SUCH AS EAST JORDAN CATALOGUE NO. 2975 OR NEENAH CATALOGUE NO. R-1974-A. IN GRASSY AREAS, THE CASTING SHALL BE PROVIDED WITH A CIRCULAR CONCRETE COLLAR FLUSH WITH THE TOP OF THE CASTING AND THE GROUND SURFACE. THE COLLAR SHALL BE MINIMUM 6" THICK AND SHALL EXTEND AT LEAST 8" BEYOND THE OUTSIDE OF THE CASTING ON ALL SIDES. IN PAVEMENT, THE TOP OF THE CASTING SHALL BE FLUSH WITH THE SURROUNDING PAVEMENT. TOP OF CLEAN-OUT SHALL BE NO MORE THAN 3" BELOW THE TOP OF THE CASTING. A #10 INSULATED SOLID COPPER LOCATOR WIRE SHALL BE WRAPPED AROUND ALL NON-METALLIC PIPES SO THAT ONE REVOLUTION IS MADE AT LEAST EVERY PIPE JOINT. SPLICES ARE TO BE MADE WITH AN APPROVED CONNECTOR. AND ARE TO BE SUITABLY PROTECTED AGAINST CORROSION. THE WIRE IS TO BE BROUGHT TO THE SURFACE WITH A CLEAN-OUT IN A CASTING. ALSO SEE THE CBU CONSTRUCTION SPECIFICATIONS FOR THE "STANDARD SANITARY LATERAL CLEAN-OUT DETAIL #19".
8) WHEREVER C900 PIPE IS USED FOR SEWER, ALL WYES SHALL BE HARCO, SIZED FOR C900 ON THE RUN AND SDR-35 ON THE BRANCH. TRANSITION FROM C900 TO SDR-35 PIPE SHALL BE MADE BY USE OF A HARCO C900 TO SDR-35 ADAPTER WYES.
9) ALL D.I.P. USED FOR SANITARY SEWER SHALL HAVE CERAMIC EPOXY LINING, MINIMUM THICKNESS 40 MILS, AND SHALL BE PROTECTO 401. AS MANUFACTURED BY INDURON PROTECTIVE COATINGS. WYES FOR D.I.P. SHALL BE HARCO D.I.P. TO SDR-35 ADAPTER WYES.

SCALE: 1"=10'

UTILITY LEGEND

WATER IRRIGATION LINE
DOMESTIC WATER SERVICE
FIRE WATER SERVICE
WATER MAIN
WATER SERVICE LINE
WATER VAULT
WATER HANDHOLE
WATER MANHOLE
WATER METER
WATER VALVE
FIRE HYDRANT
FLUSH HYDRANT
WATER MASTER METER
WATER AIR RELEASE VALVE
WATER END CAP
WATER TANK
SANITARY MAIN LINE
SANITARY FORCE MAIN
LOW PRESSURE SEWER
SANITARY LATERAL
SANITARY MANHOLE
SANITARY CLEANOUT
SANITARY VAULT METER
SANITARY METER
SANITARY LIFT STATION
SINGLE FLUSHING CONN.
DOUBLE FLUSHING CONN.
LOW PRESSURE SEWER PUMP
L.P.S. AIR RELEASE VALVE
F.M. AIR RELEASE VALVE
GREASE TRAP
SEPTIC TANK
MONITORING WELL
STORM PIPE
ROOF DRAIN PIPE
UNDERDRAIN PIPE
STORM MANHOLE
STORM CURB INLET
STORM CATCH BASIN
STORM YARD INLET
STORM DOWNSPOUT
STORM TRENCH DRAIN
STORM PIPE END SECTION
PROPOSED GAS LINE
GAS MANHOLE
GAS VAULT METER
GAS METER
GAS PLANT
GAS SHUTOFF VALVE
GAS MARKER
CABLE TV
OVERHEAD ELECTRIC
OVERHEAD TELEPHONE
UNDERGROUND FIBER OPTIC
UNDERGROUND TELEPHONE
ELECTRIC VAULT
ELECTRIC MANHOLE
ELECTRIC TRANS. PAD
ELECTRIC TRANS. VAULT
ELECTRIC HANDHOLE
ELECTRIC POWER POLE
PHONE RISER
PHONE VAULT
PHONE MANHOLE



UTILITY PLAN

Smith Brchob & Associates, Inc.
133 S. Clarizz Boulevard
Bloomington, Indiana 47401
Telephone (812) 336-6536
Fax (812) 336-0513
Web: http://smithbrchob.com

CERTIFICATION DATE: / /

JOB TITLE: 424 E. 6TH STREET MULTIFAMILY DEVELOPMENT

REVISIONS	BY	DATE

DESIGNED SAB
DRAWN SAB
CHECKED
DATE

JOB NUMBER 5400
SHEET C202
DATE 10/31/16
GRADING & UTILITY PLAN

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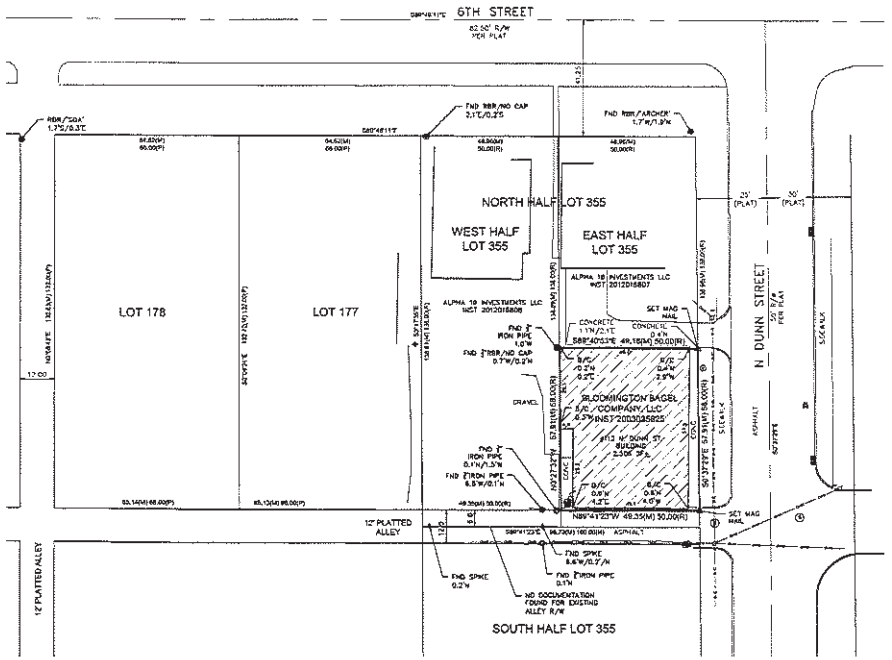


LEGAL DESCRIPTION-INSTRUMENT 2003035825
FIFTY-EIGHT (58) FEET BY PARALLEL LINES OFF OF THE SOUTH END OF THE EAST HALF OF THE NORTH HALF OF EAST FRACTIONAL LOT NO. 355 IN THE CITY OF BLOOMINGTON, INDIANA.

GENERAL NOTES
1) UNDERGROUND UTILITIES WERE LOCATED FROM ABOVE GROUND OBSERVATIONS ONLY AND SHOULD NOT BE CONSIDERED COMPLETE.
2) ALL MONUMENTS FOUND IN PERFORMANCE OF THIS SURVEY WERE FOUND FLUSH WITH THE EXISTING GROUND UNLESS OTHERWISE NOTED, AND THE AGE AND ORIGIN OF SAID FOUND MONUMENTS ARE UNKNOWN UNLESS OTHERWISE NOTED.
3) REFERENCE IS MADE TO THE FOLLOWING SURVEYS OR PLATS:
SMITH GUILLMAN & ASSOCIATES. JOB NO. 63-227, DATED AUGUST 2, 1963
BEN BLOSSOM, RLS 0539, JOB NO. 1236, DATED MAY 19, 1998 (VON LEE THEATER SURVEY)

SURVEYOR'S REPORT
CLIENT: BLOOMINGTON BAGEL COMPANY
JOB NUMBER: 5276
TYPE OF SURVEY: RETRACEMENT SURVEY
CLASS OF SURVEY: URBAN SURVEY (865 IAC 1-12)
FIELD WORK COMPLETED: DECEMBER 16, 2015
LOCATION OF SURVEY: 813 N. DUNN ST., BLOOMINGTON, INDIANA

IN ACCORDANCE WITH TITLE 865, ARTICLE 1, CHAPTER 12 (RULE 12) OF THE INDIANA ADMINISTRATIVE CODE (IAC), THE FOLLOWING OBSERVATIONS AND OPINIONS ARE SUBMITTED REGARDING THE UNCERTAINTY IN THE POSITION OF THE LINES AND CORNERS ESTABLISHED AND/OR REESTABLISHED ON THIS SURVEY AS A RESULT OF:

1) AVAILABILITY AND CONDITION OF REFERENCE MONUMENTS;
2) CLARITY AND/OR AMBIGUITY OF THE RECORD DESCRIPTION(S) USED AND/OR THE ADJOINER'S DESCRIPTIONS; AND
3) OCCUPATION OR POSSESSION LINES;
4) MEASUREMENTS (RELATIVE POSITIONAL ACCURACY)

NOTE: THERE MAY EXIST UNWRITTEN RIGHTS ASSOCIATED WITH THESE UNCERTAINTIES.

1) AVAILABILITY AND CONDITION OF REFERENCE MONUMENTS
MONUMENTS USED IN PERFORMANCE OF THIS SURVEY ARE LABELED HEREON. UP TO 0.5 FEET OF UNCERTAINTY.
2) CLARITY AND/OR AMBIGUITY OF THE RECORD DESCRIPTION(S)
NO RECORD DOCUMENTATION WAS FOUND FOR THE EXISTING ALLEY ALONG THE SOUTH BOUNDARY LINE, NEITHER THE ORIGINAL PLAT NOR THE DEED DESCRIPTION MAKE REFERENCE TO THE ALLEY. THE DEED DESCRIPTION CALLS FOR THE SOUTH 58 FEET OF THE NORTH HALF OF THE EAST HALF. THE DESCRIPTION WOULD PLACE THE SOUTH BOUNDARY LINE IN THE CENTER OF THE ALLEY. MONUMENTATION WAS FOUND 6 FEET NORTH OF THE ALLEY CENTERLINE AND ASSUMED 58 FEET NORTH THEREOF. SAID MONUMENTATION WAS HELD FOR THE DEED DESCRIBED 58 FEET. THIS CAUSED UNCERTAINTY OF UP TO 6 FEET IN THE NORTH/SOUTH PLACEMENT OF THE BOUNDARY LINES. THE CLIENT AND THE CLIENT'S ATTORNEYS HAVE BEEN MADE AWARE OF THIS UNCERTAINTY.
UP TO 1.4 FEET OF UNCERTAINTY BASED ON PLATTED DIMENSIONS.
3) OCCUPATION OR POSSESSION LINES
POSSESSION LINES AT THE TIME OF THE SURVEY ARE LABELED HEREON. UP TO 4.2 FEET OF UNCERTAINTY.
4) MEASUREMENTS (RELATIVE POSITIONAL ACCURACY)
URBAN SURVEY (++ 0.07 FOOT PLUS 50 PARTS PER MILLION) AS DEFINED IN 865 IAC 1-12-4, EFFECTIVE MAY 4, 2006.

THEORY OF LOCATION
DUE TO NEW AND RELOCATED CURB LINES FOR DUNN STREET, THE CENTERLINE AND CORRESPONDING WEST RIGHT OF WAY LINE WAS ESTABLISHED FROM THE ABOVE REFERENCED SURVEYS BY BEN BLOSSOM AND SNA OF THE NEXT BLOCK EAST FOR DUNN'S ADDITION BETWEEN DUNN STREET AND INDIANA AVENUE. SAID CENTERLINE MATCHED WELL WITH THE EXISTING CROWN OF THE ROAD. THE WIDTH OF DUNN STREETS RIGHT OF WAY IS SHOWN AT DIFFERENT WIDTHS BY DIFFERENT PLATS. A TOTAL RIGHT OF WAY OF 55 FEET WAS HELD WITH THE SUBJECT PROPERTY'S BEING A 25 FOOT HALF RIGHT OF WAY. THE RIGHT OF WAYS FOR 6TH STREET, KIRKWOOD AVENUE AND THE 12 FOOT ALLEYS WERE ESTABLISHED BY EXISTING CURB LINES AND MATCHED WELL WITH FOUND MONUMENTATION AND OCCUPATION LINES. TWO IRON PIPES FOUND NEAR THE NORTHWEST AND SOUTHWEST BOUNDARY CORNERS WERE HELD AS THE BEST EVIDENCE OF THE DESCRIBED 58 FEET IN THE LEGAL DESCRIPTION (SEE CLARITY AND/OR AMBIGUITY OF THE RECORD DESCRIPTIONS). SAID LINES MATCHED WELL WITH EXISTING AND HISTORIC OCCUPATION LINES.

SURVEYOR'S CERTIFICATE
THIS SURVEY WAS PERFORMED UNDER THE DIRECTION OF THE UNDERSIGNED, AND TO THE BEST OF THIS SURVEYOR'S KNOWLEDGE AND BELIEF WAS EXECUTED ACCORDING TO SURVEY REQUIREMENTS IN 865 IAC 1-12 FOR THE STATE OF INDIANA.

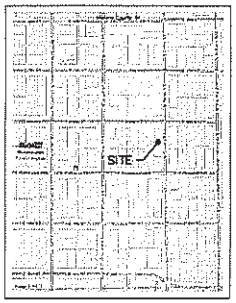
DATED FEBRUARY 22, 2016

TODD M. BORGMAN
REGISTERED LAND SURVEYOR NO. 21200021
STATE OF INDIANA

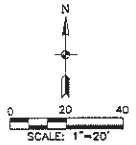
LS21200021 STATE OF INDIANA TODD M. BORGMAN REGISTERED LAND SURVEYOR

I AFFIRM, UNDER THE PENALTIES FOR PERJURY, THAT I HAVE TAKEN REASONABLE CARE TO REDACT EACH SOCIAL SECURITY NUMBER IN THIS DOCUMENT, UNLESS REQUIRED BY LAW. (TODD BORGMAN)

BASIS OF BEARINGS AND ELEVATIONS ARE ASSUMED.



LEGEND
- RR SPIKE
- REBAR
- IRON PIN
- MAG NAIL
- UTILITY POLE
- GUY WIRE
- ELECTRIC METER
- SANITARY MANHOLE
- WATER VALVE
- WATER METER
- SIGN
- GAS VALVE
- GAS METER
- OVERHEAD WIRES ——— OHW ———
- M MEASURED
- P PLATTED
- R RECORD
- BC BUILDING CORNER



Smith Bartsch & Associates, Inc.
1935 S. Gates Boulevard
Bloomington, Indiana, 47401
Telephone: (812) 331-9556
Fax: (812) 331-9557
Web: http://members.sbcglobal.net/sba

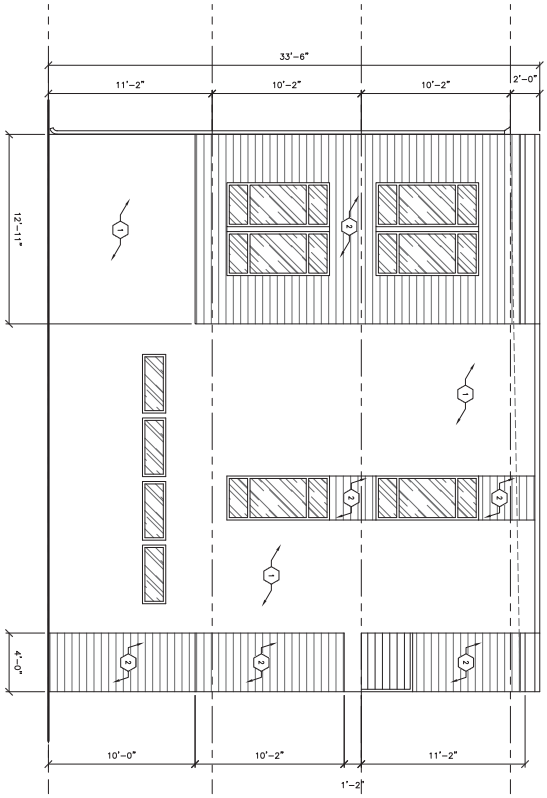
JOB TITLE
BOUNDARY SURVEY
BLOOMINGTON BAGEL CO.
BLOOMINGTON, INDIANA
SEC 33-T9N-R1W

BY	DATE	REVISIONS

DRAWN	CHECKED	DATE
KS	TMB	02/17/16

JOB NUMBER 5276
SHEET 1 OF 1
DATE 02/17/16
BOUNDARY SURVEY

SP-39-16 Petitioner's Boundary Survey



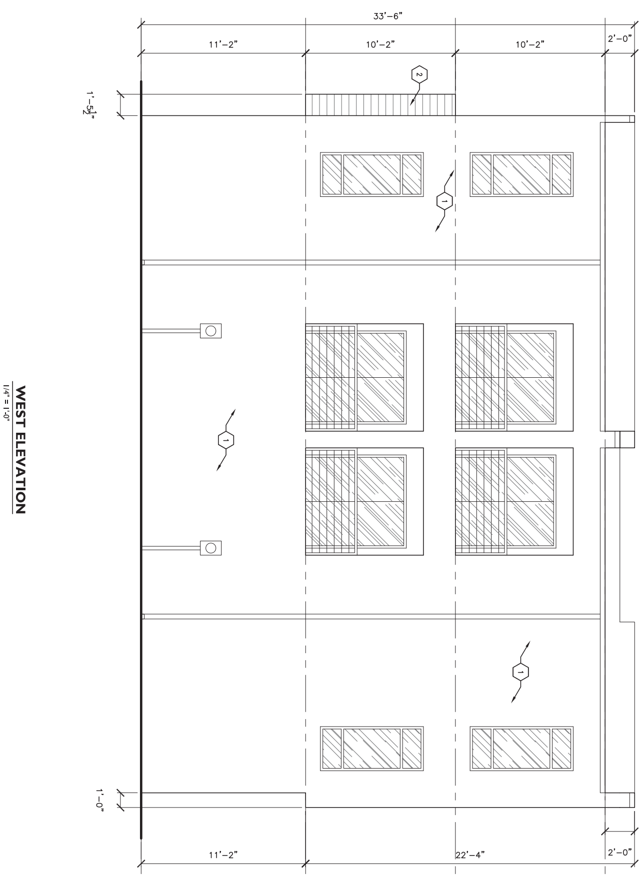
SOUTH ELEVATION
1/4" = 1'-0"

SCHEMATIC SOUTH ELEVATION

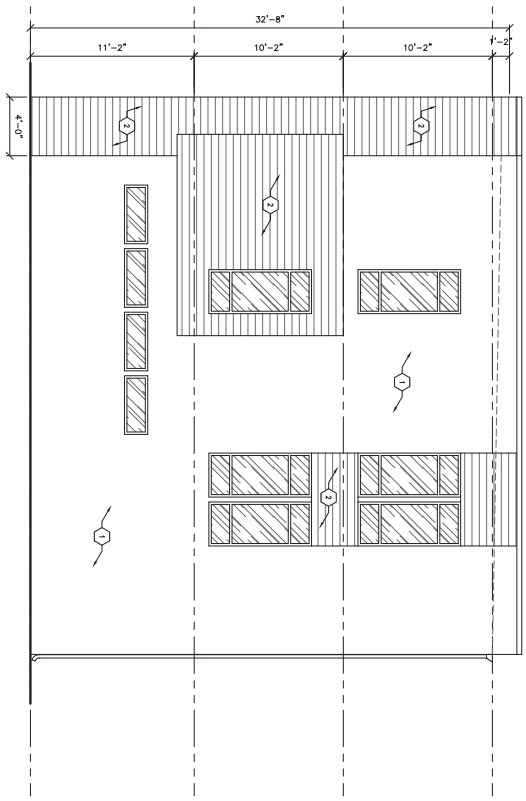
PROJECT NAME:	
DRAWING PROPERTY:	
DESIGN PHASE:	CONCEPT PLANNING
PROJECT LOCATION:	424 EAST 6TH STREET
DATE:	12.01.16
DRAWING SCALE:	1/4" = 1'-0"

TABOR BRUCE
ARCHITECTURE & DESIGN INC.

SP-39-16 Petitioner's Site Plan



SP-39-16 Petitioner's Site Plan



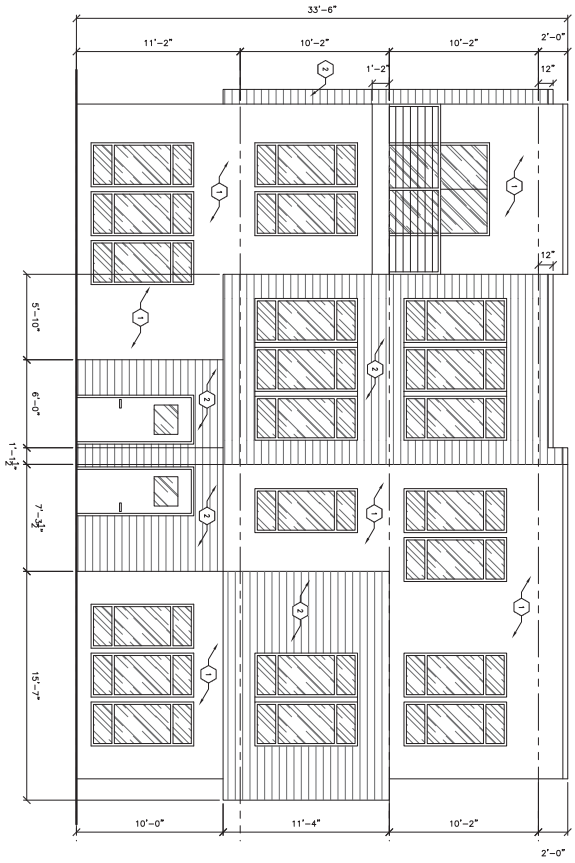
NORTH ELEVATION
1/4" = 1'-0"

SCHEMATIC NORTH ELEVATION

PROJECT NAME	
DRAWING PROPERTY	
DESIGN PHASE	CONCEPT PLANNING
PROJECT LOCATION	424 EAST 6TH STREET
DATE	12.01.16
DRAWING SCALE	1/4" = 1'-0"

TABOR BRUCE
ARCHITECTURE & DESIGN INC.

SP-39-16 Petitioner's Site Plan



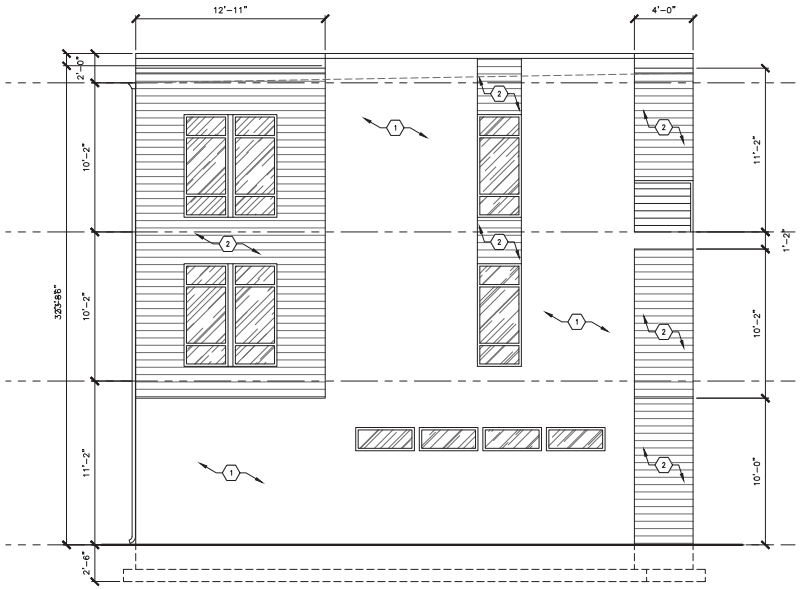
EAST ELEVATION
1/4" = 1'-0"

SCHEMATIC EAST ELEVATION

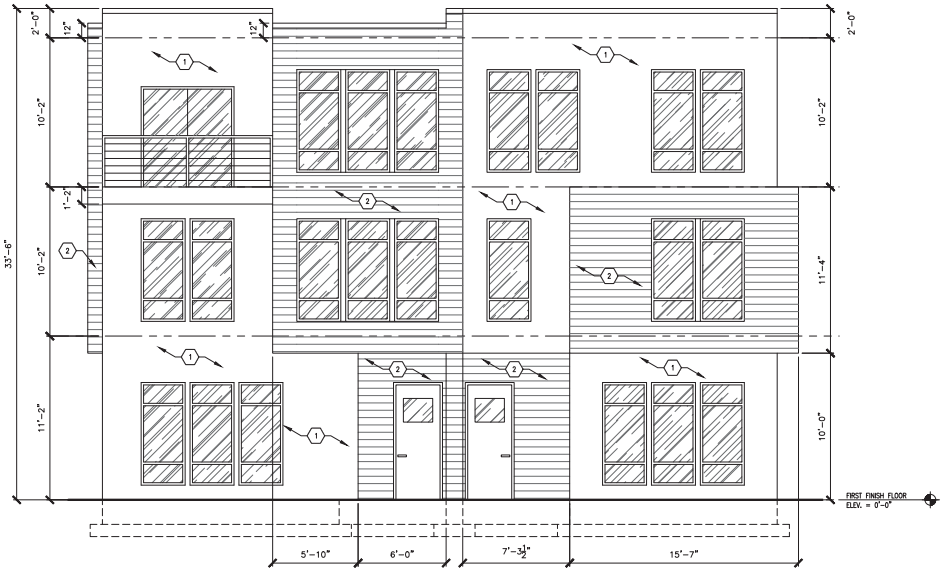
PROJECT NAME:	
DRAWING PROPERTY:	PROJECT LOCATION: 424 EAST 6TH STREET
DESIGN PHASE:	DATE: 12.01.16
CONCEPT PLANNING	DRAWING SCALE: 1/4" = 1'-0"

TABOR BRUCE
ARCHITECTURE & DESIGN INC.

SP-39-16 Petitioner's Site Plan



2 SOUTH ELEVATION
1/4" = 1'-0"



1 EAST ELEVATION
1/4" = 1'-0"

SP-39-16 Petitioner's Site Plan

ELEVATION KEYNOTES:

1. LP PANELING.
2. LP SIDING.
3.
4.
5.
6.
7.
8.

TABOR BRUCE
ARCHITECTURE & DESIGN INC.
1101 S. WALNUT STREET - BLOOMINGTON, IN. 47401
TELEPHONE: (812) 332-6268 WEB: WWW.TABORBRUCE.COM

REVISIONS

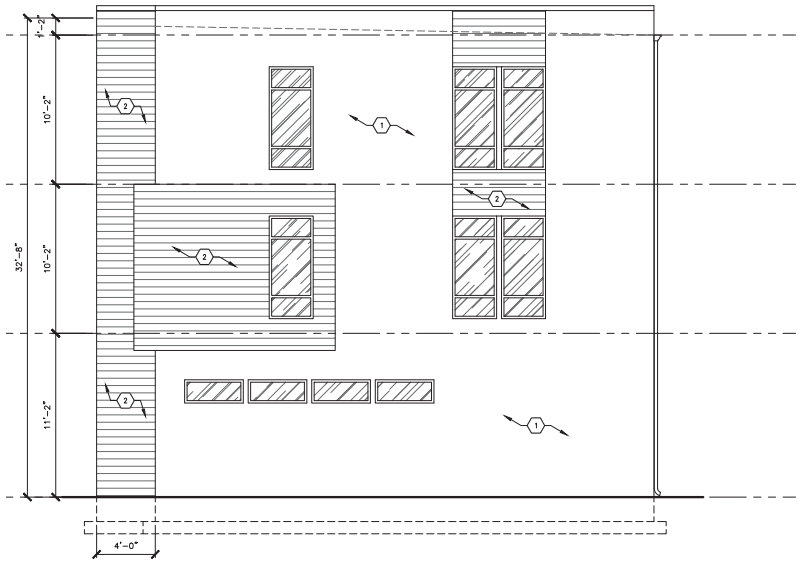
A NEW CONSTRUCTION FOR:
DEMMING PROPERTY
424 EAST 6TH STREET
BLOOMINGTON, INDIANA 47408

PROJECT NO.	XX16
DATE	12.09.16
DRAWN BY	C. SCHAEFFER
CHECKED BY	D. BRUCE

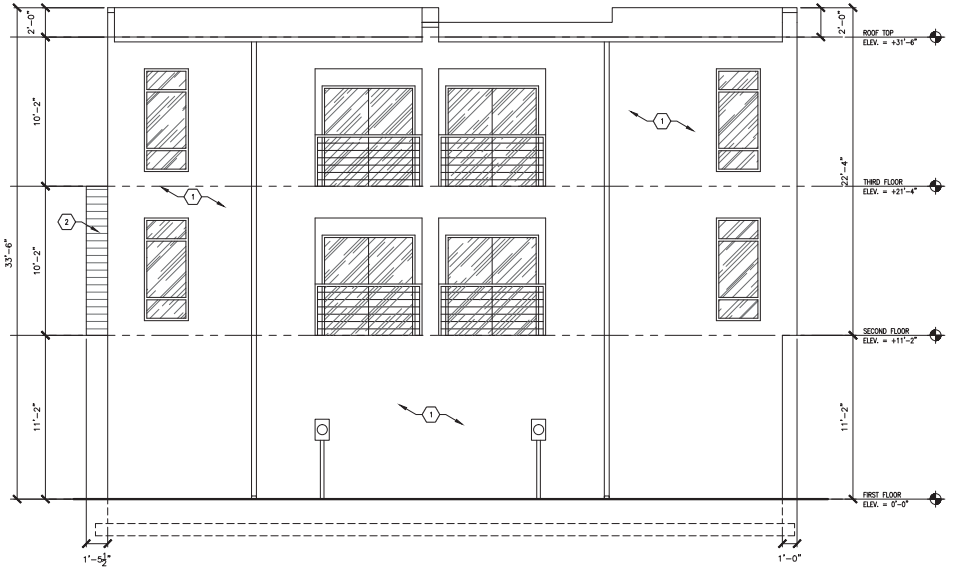
SHEET NAME
EXTERIOR ELEVATIONS

SHEET NO.
AE201

SP-39-16 Petitioner's Site Plan



2 NORTH ELEVATION
1/4" = 1'-0"



1 WEST ELEVATION
1/4" = 1'-0"

ELEVATION KEYNOTES:

1. LP PANELING.
2. LP SIDING.
3.
4.
5.
6.
7.
8.

TABOR BRUCE
ARCHITECTURE & DESIGN INC.
1101 S. WALNUT STREET - BLOOMINGTON, IN. 47401
TELEPHONE: (812) 332-6268 WEB: WWW.TABORBRUCE.COM

REVISIONS

A NEW CONSTRUCTION FOR:
DEMMING PROPERTY
424 EAST 6TH STREET
BLOOMINGTON, INDIANA 47408

PROJECT NO.	XX16
DATE	12.09.16
DRAWN BY	C. SCHAEFFER
CHECKED BY	D. BRUCE

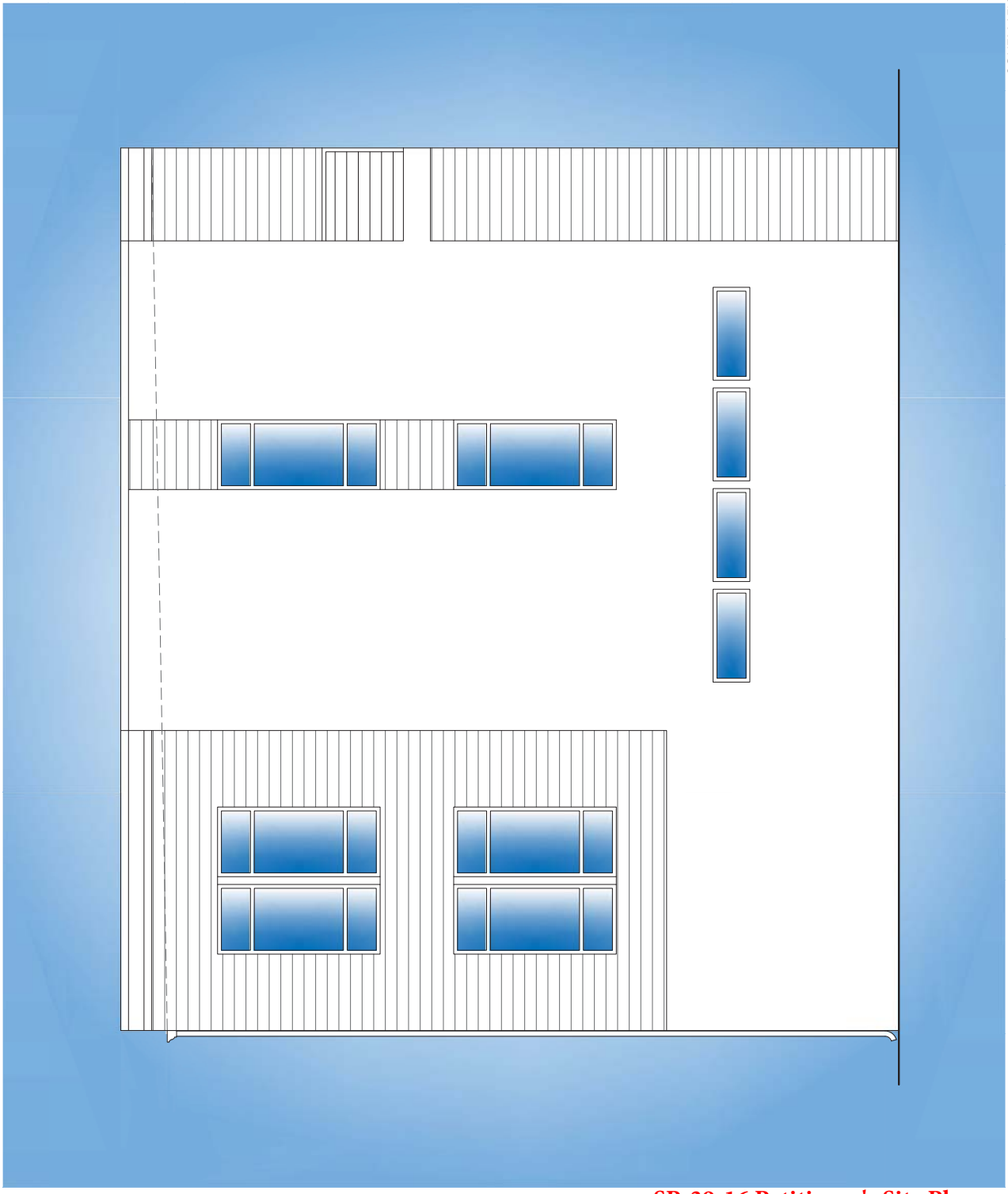
SHEET NAME
EXTERIOR ELEVATIONS

SHEET NO.
AE201

TABOR BRUCE ARCHITECTURE & DESIGN, INC.

SCHEMATIC SOUTH ELEVATION

PROJECT NAME:	PROJECT LOCATION:	DATE:
DEMMING PROPERTY	424 EAST 6TH STREET	12.01.16
DESCRIPTION:		DRAWING SCALE:
CONCEPT PLANNING		1/2" = 1'-0"



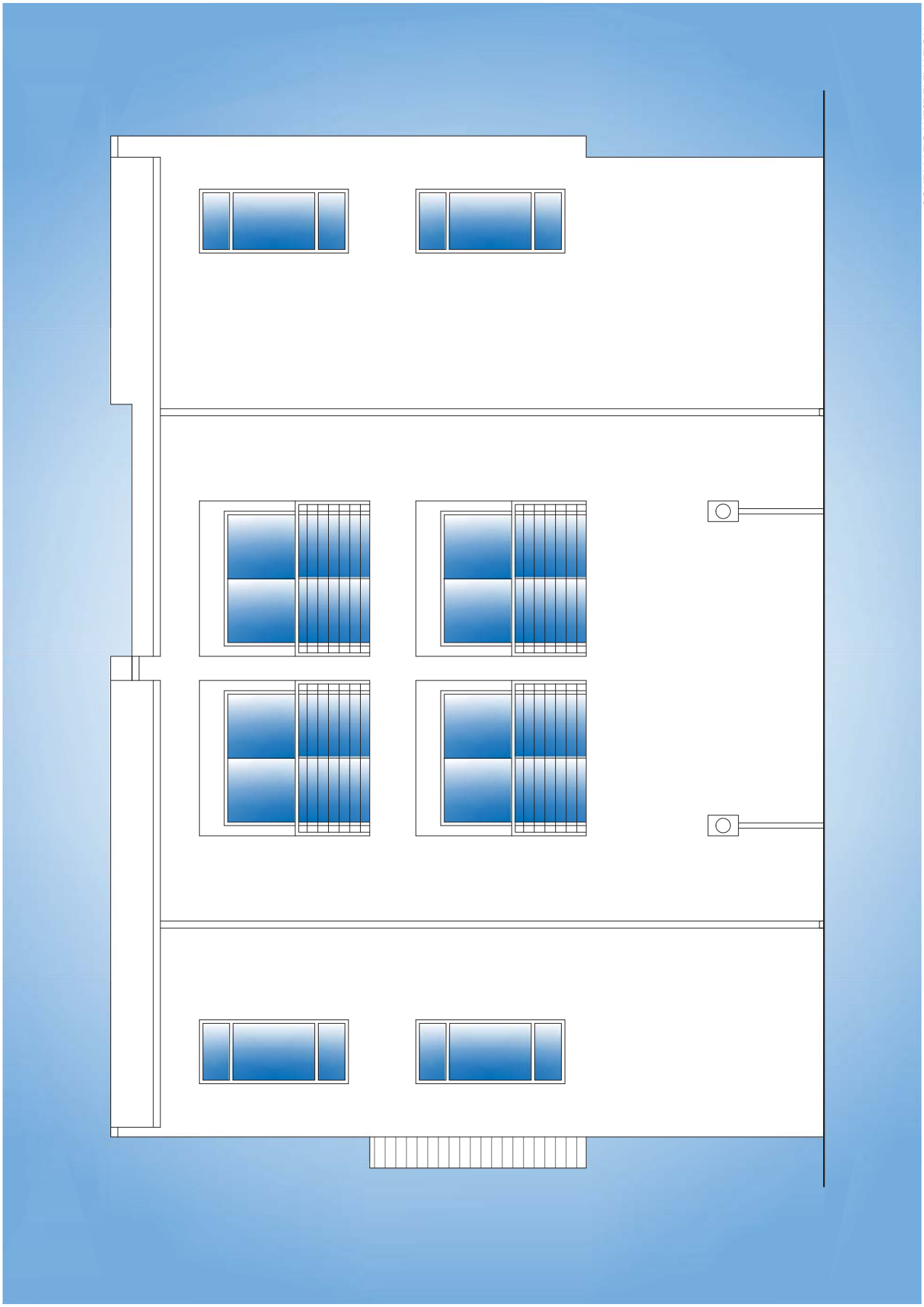
SOUTH ELEVATION
1/2" = 1'-0"

SP-39-16 Petitioner's Site Plan

TABOR BRUCE
ARCHITECTURE & DESIGN, P.C.

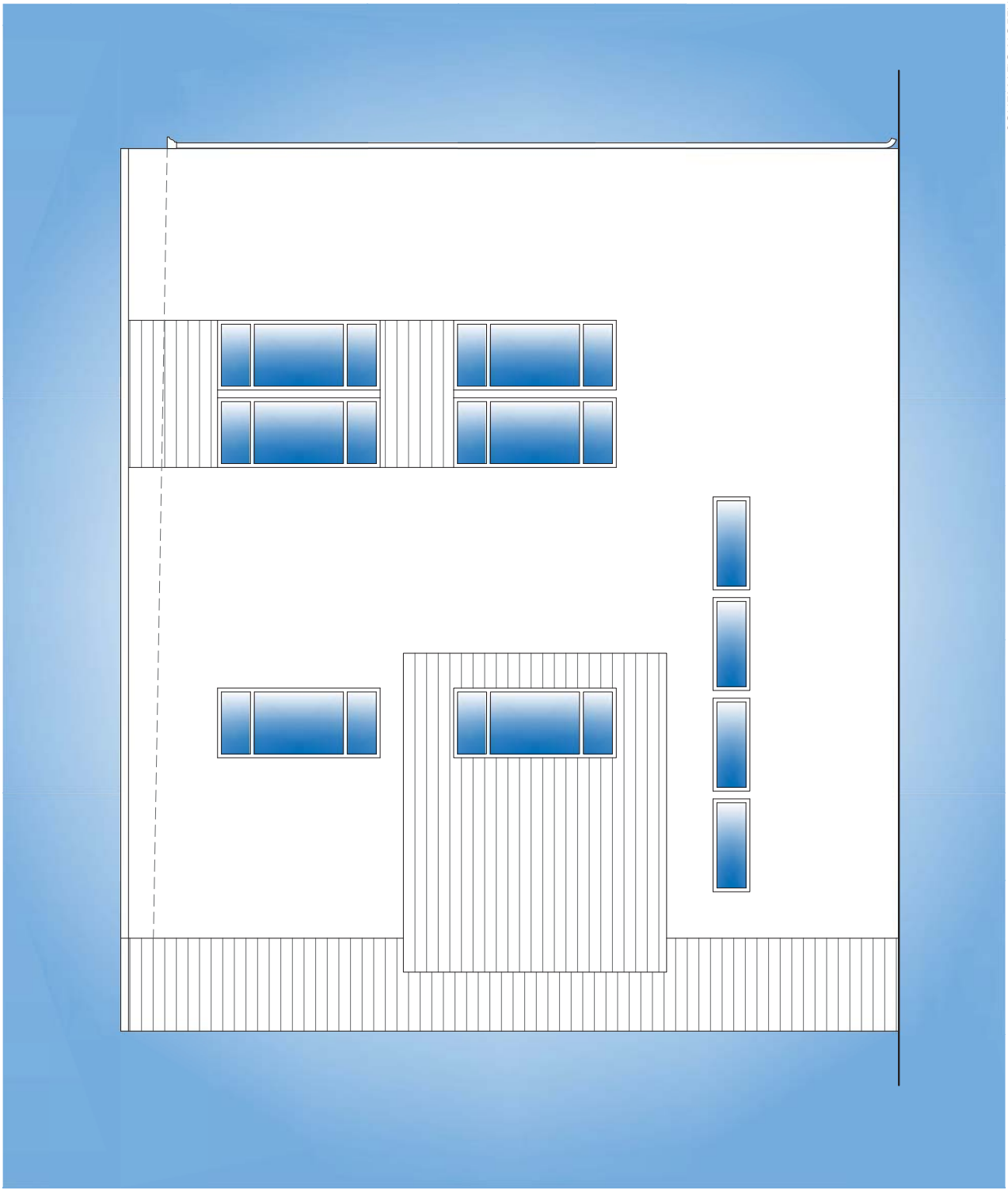
SCHEMATIC WEST ELEVATION

PROJECT NAME:	DATE:
DIMMING PROPERTY	12.01.16
PROJECT LOCATION:	DRAWING SCALE:
424 EAST 6TH STREET	1/2" = 1'-0"
CONCEPT PLANNING	© 2016 TABOR BRUCE ARCHITECTURE & DESIGN



WEST ELEVATION
1/2" = 1'-0"

SP-39-16 Petitioner's Site Plan



NORTH ELEVATION
1/2" = 1'-0"

SCHEMATIC NORTH ELEVATION

TABOR BRUCE ARCHITECTURE & DESIGN, INC.

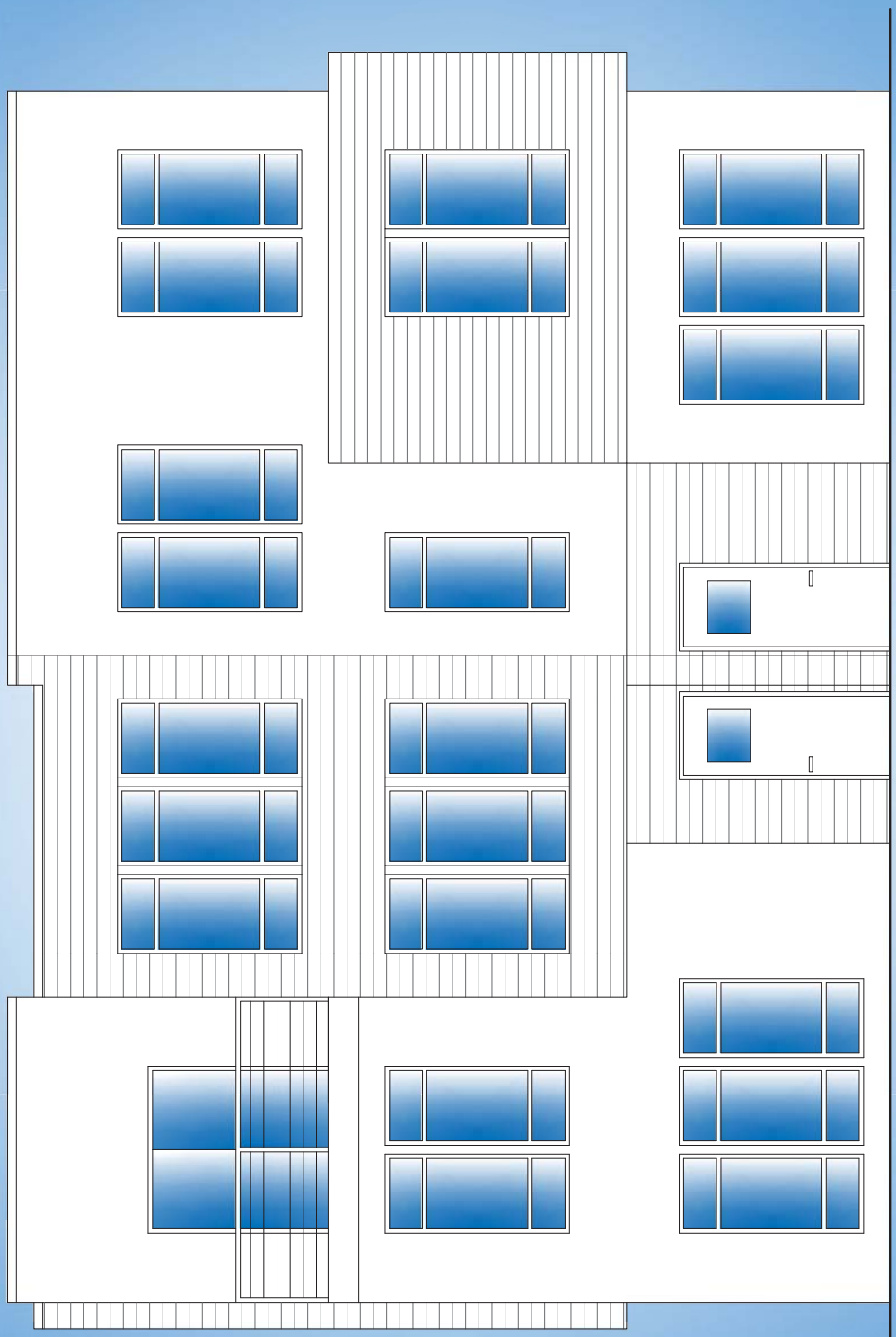
PROJECT NAME:	DATE:
DEMMING PROPERTY	12.01.16
PROJECT PHASE:	DRAWING SCALE:
CONCEPT PLANNING	1/2" = 1'-0"
PROJECT LOCATION:	
424 EAST 6TH STREET	

SP-39-16 Petitioner's Site Plan

TABOR BRUCE ARCHITECTURE & DESIGN, INC.

SCHEMATIC EAST ELEVATION

PROJECT NAME:	DATE:
DIMMING PROPERTY	12.01.16
DESCRIPTION:	DRAWING SCALE:
CONCEPT PLANNING	1/2" = 1'-0"
PROJECT LOCATION:	
424 EAST 5TH STREET	



EAST ELEVATION
1/2" = 1'-0"

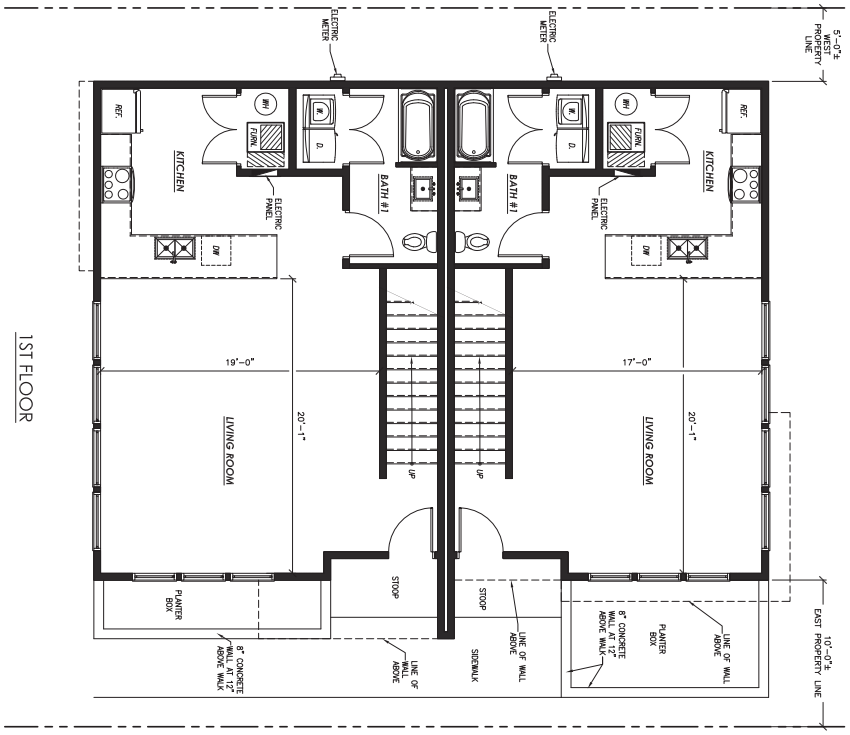
SP-39-16 Petitioner's Site Plan

SP-39-16 Petitioner's 3D Renderings

SP-39-16 Petitioner's 3D Renderings

SP-39-16 Petitioner's 3D Renderings

SP-39-16 Petitioner's 3D Renderings

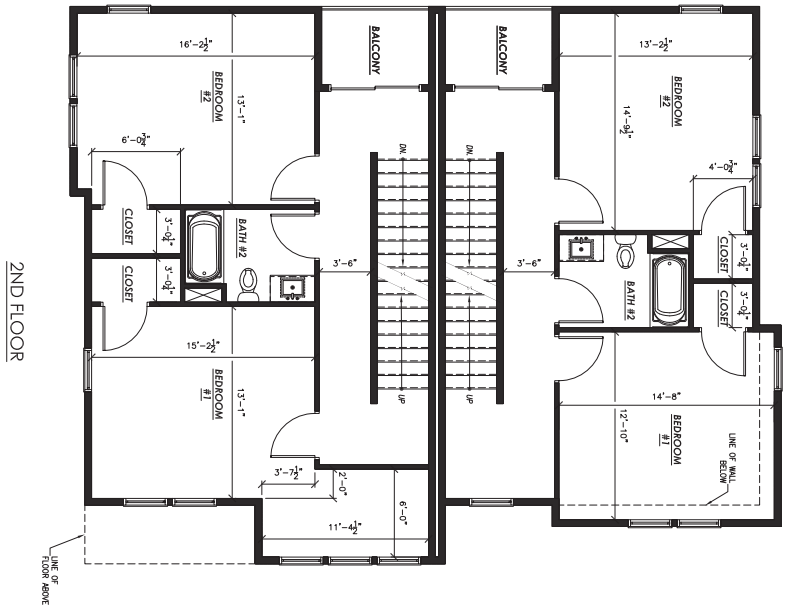


SCHEMATIC FIRST FLOOR PLAN

PROJECT NAME:	
DEMMING PROPERTY	
PROJECT LOCATION:	
424 EAST 6TH STREET	
DESIGN PHASE:	DATE:
CONCEPT PLANNING	12.01.16
© 2016 TABOR BRUCE ARCHITECTURE & DESIGN	DRAWING SCALE: 1/4" = 1'-0"

TABOR BRUCE
ARCHITECTURE & DESIGN INC.

SP-39-16 Petitioner's Floor Plans

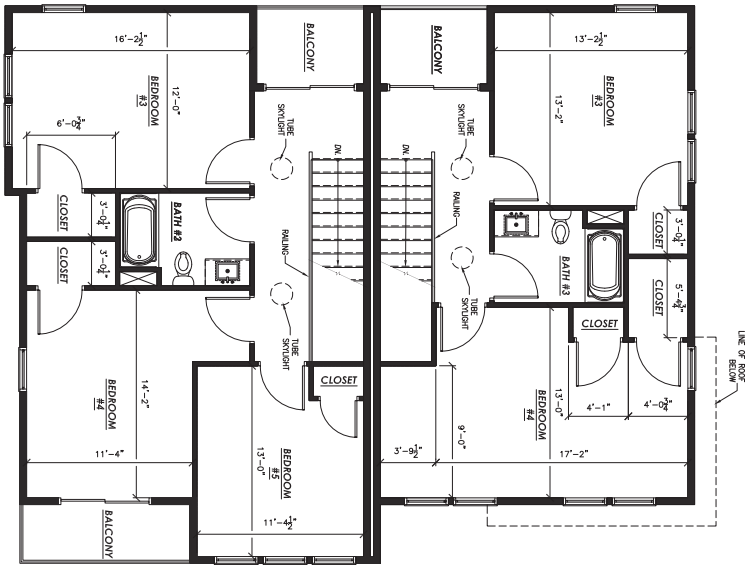


SP-39-16 Petitioner's Floor Plans

SCHEMATIC SECOND FLOOR PLAN

PROJECT NAME:	
DEMMING PROPERTY	
DESIGN PHASE:	
CONCEPT PLANNING	
PROJECT LOCATION:	
424 EAST 6TH STREET	
SCALE:	
12.01.16	
DRAWING SCALE:	
1/4" = 1'-0"	

TABOR BRUCE
ARCHITECTURE & DESIGN INC.



3RD FLOOR

SCHEMATIC THIRD FLOOR PLAN

PROJECT NAME	
DEMMING PROPERTY	
PROJECT LOCATION	
424 EAST 6TH STREET	
DESIGN PHASE	DATE
CONCEPT PLANNING	12.01.16
© 2016 TABOR BRUCE ARCHITECTURE & DESIGN	DRAWING SCALE
	1/4" = 1'-0"

TABOR BRUCE
ARCHITECTURE & DESIGN INC.

SP-39-16 Petitioner's Floor Plans

SP-39-16 Neighbor Remonstrance Letter

January 3, 2017

Dear Commission Member:

As trustee for Spencer Hudgins Living Trust, the entity which holds title to the adjacent building to 424 East 6th Street, I cannot express any opinion other than total opposition to any changes to the lot until the litigation between Sheree Demming and the trust has been settled IN WRITING and all liens which may be clouding the title regarding her action have been expunged IN WRITING from the Monroe County Recorder's Office. The subject of contention is a personal vendetta between Ms. Demming and Cheryl Underwood, who is purchasing the adjacent building, 420 East 6th Street, on a land contract. My understanding from Ms. Demming herself is that she has been made financially whole, but has not dropped the legal action against the Trust IN WRITING nor cleared up any liens IN WRITING.

Very truly yours,

Marjorie Hudgins, Trustee

Marjorie Hudgins, Trustee

Spencer Hudgins Living Trust

BLOOMINGTON PLAN COMMISSION **CASE #: ZO-40-16**
STAFF REPORT **DATE: January 9, 2017**
LOCATION: 4023 W. 3rd Street

PETITIONER: GMS-Pavilion Properties
112 E. 3rd Street

CONSULTANT: Bynum Fanyo & Associates, Inc.
116 W 6th Street, Bloomington

REQUEST: The petitioner is requesting to rezone 1.98 acres from Planned Unit Development (PUD) to Commercial General (CG). Also requested is a waiver from the required second hearing.

BACKGROUND:

Area:	1.98 acres
Current Zoning:	PUD
GPP Designation:	Community Activity Center
Existing Land Use:	Multi-tenant commercial building
Proposed Land Use:	Multi-tenant commercial building
Surrounding Uses:	North – County Jurisdiction (single family residences)
	West – Bank
	East – Gas station
	South – County Jurisdiction (single family residences)

REPORT: This property is located at 4023 W. 3rd Street and is zoned Planned Unit Development (PUD). The properties to the north and south are in the County Jurisdiction and the properties to the east and west are zoned Commercial General (CG). This site received a rezoning approval in 1993 (PUD-58-93) to rezone the property from Business Limited (BL) to a Planned Unit Development. The site has been developed with a 29,000 sq. ft. multi-tenant commercial building and surface parking lot with 106 parking spaces.

The petitioner is requesting to rezone the property from Planned Unit Development (PUD) to Commercial General (CG). The rezone is requested to allow for a possible new medical clinic, a dialysis center, in one of the tenant spaces. A specific list of permitted uses was approved with the rezoning and a "medical clinic" was not one of the permitted uses. With this petition there would be new landscaping installed throughout the property as well as a new bike rack. There is an existing sidewalk along the entire property frontage. No other site improvements are required. No changes to the building are proposed with this petition.

GROWTH POLICIES PLAN: This property, as well as properties to the east and west that are zoned Commercial General, are designated as "*Community Activity Center*". The GPP notes that a *Community Activity Center* is designed to provide community-serving commercial opportunities in the context of a high density, mixed use development. CAC's are larger in scale and higher in intensity than the *Neighborhood*

Activity Center. The primary land uses in a CAC should be medium scaled commercial retail and service uses, which would be accomplished with this rezoning request.

ISSUES:

Parking: A 29,000 sq. ft. multi-tenant building has a maximum allowance of one parking space per 250 sq. ft., so the maximum number of allowed spaces for this property is 116. There are 105 parking spaces shown for the 29,000 sq. ft. and does not exceed the maximum number of spaces allowed.

List of Uses: The following uses were approved with the initial Planned Unit Development and would be replaced with the list of uses currently permitted in the Commercial General district.

Commercial, Retail

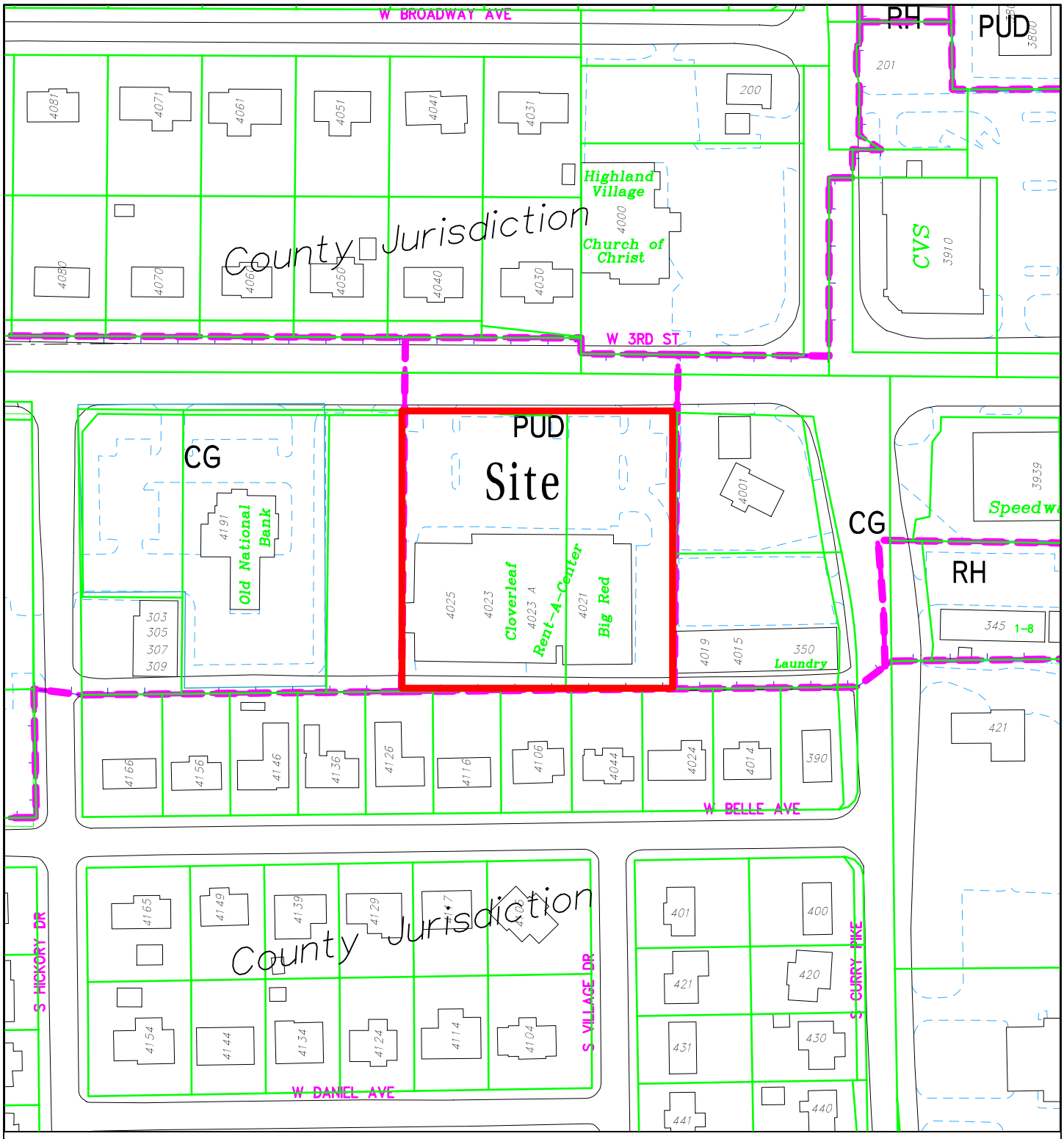
- Antiques
- Apparel
- Appliance stores, small
- Arts and crafts
- Auto parts/supplies, new
- Bakery
- Bicycle shops
- Books, newsstands
- Dairy products
- Drugstore, sundry
- Farm produce
- Florist shops
- Furniture and appliances
- Gift shop
- Grocery and meats
- Hardware
- Jewelry
- Liquor store
- Sporting goods
- Used merchandise
- Variety store
- Video store

Commercial, Trade

- Appliance repair, small
- Banks (branch)
- Business service
- Business and professional office
- Candy, confectionary
- Eating, Drinking (Restaurant) (limit 3,000 sq. ft. of total building area)
- Laundry and Dry Cleaning (pick up only)
- Printing (job, service)

CONCLUSION: This property is surrounded on the east and west with other properties that are zoned Commercial General. The rezoning of this property to a current zoning district would help reduce possible future problems associated with a list of old land uses that are not currently outlined in the Unified Development Ordinance. Staff has not identified any negative impacts as a result of this rezoning.

RECOMMENDATION: Staff recommends approval of the waiver for the required second hearing and forwarding this petition to the Common Council with a favorable recommendation and no conditions.



Z0-40-16 GMS-Pavilion Properties

4023 W 3rd Street

Plan Commission

Site Location, Zoning, Parcels, Land Use

By: greulice

5 Jan 17

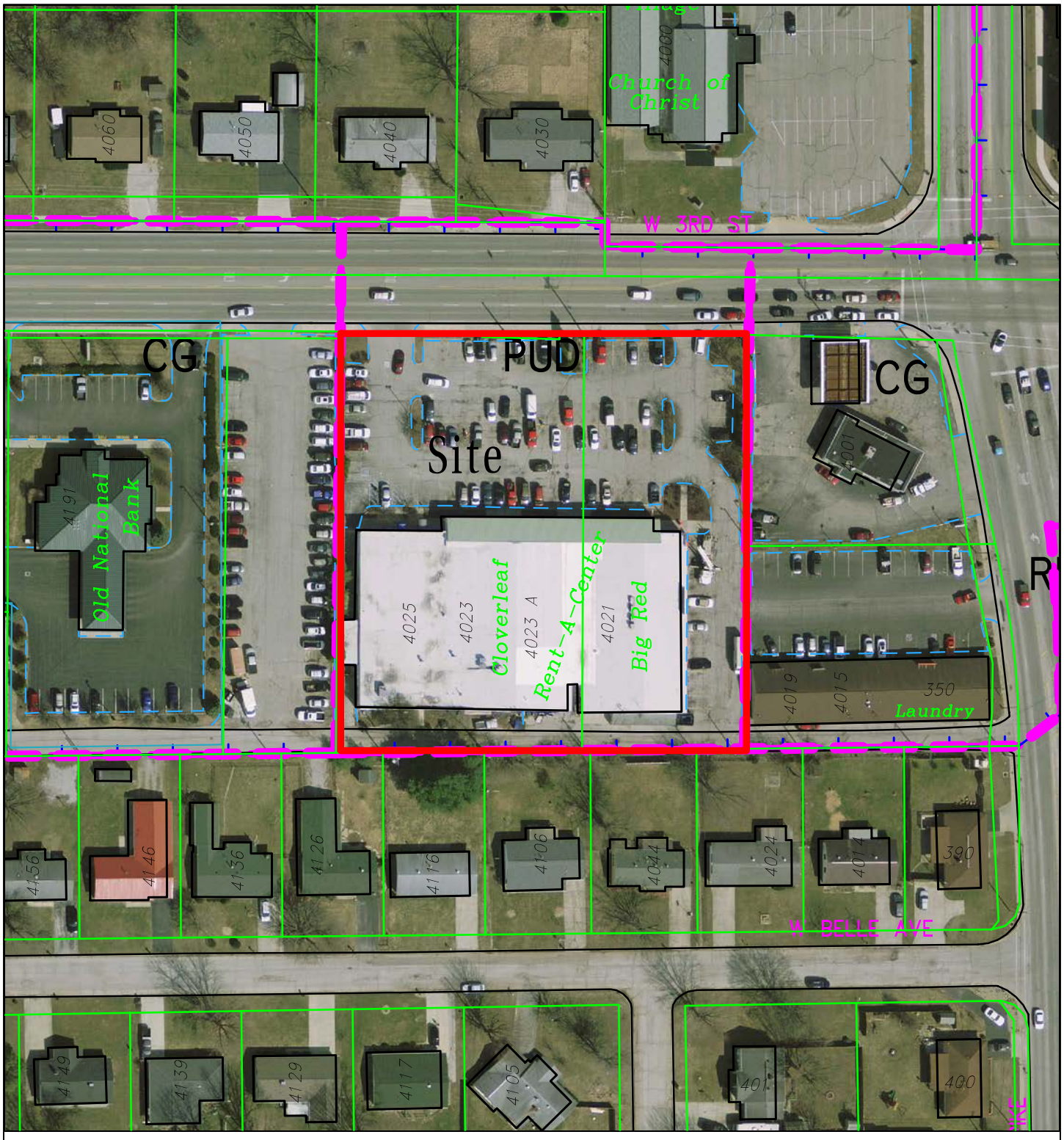
150 0 150 300 450

N

City of Bloomington
Planning & Transportation

Scale: 1" = 150'

For reference only; map information NOT warranted.



ZO-40-16 GMS-Pavilion Properties

4023 W 3rd Street

Plan Commission

2014 Aerial Photograph

By: greulice

5 Jan 17

100 0 100 200 300

N

City of Bloomington
Planning & Transportation

Scale: 1" = 100'

For reference only; map information NOT warranted.

BYNUM FANYO & ASSOCIATES, INC.

ARCHITECTURE
CIVIL ENGINEERING
PLANNING

December 27, 2016

City of Bloomington Planning Department
And Plan Commission members
401 N. Morton Street
Bloomington, Indiana 47403

RE: 4023 W. 3rd Street, Bloomington, IN 47404
Plan Commission Petitioner's Statement for re-zone (REVISED December 27, 2016)

Plan Commission members or To Whom It May Concern:

On behalf of Pavilion Properties, Inc., Bynum Fanyo & Associates, Inc. would like to request approval of the subject project's re-zone to be sent with a positive recommendation to the City Council for review. The property is currently zoned as a PUD Outline Plan that was approved October 11, 1993. The subject property is 3 parcels that currently contain a commercial building with associated parking, curbed islands, sidewalks and drives. The request is to change the current PUD Outline Plan to zoned 'CG' (Commercial General) as outlined in the City of Bloomington Unified District Ordinance (UDO) for these 3 parcels. 2 of the 3 parcels are owned by Pavilion Properties, Inc. and the eastern parcel is owned by BRL Holdings, LLC. We have included an affidavit from BRL Holdings, LLC to change this zoning.

The building is partitioned to serve a restaurant, liquor sales, and other vacant partitions, currently. The reason for the re-zone is to use one of the vacant partitions of the building for a 'medical clinic' use that is currently prohibited by the PUD Outline Plan. The Planning Department recommended revising the zoning to the 'CG' because it accepts the 'medical clinic' in this zone (along with the other current uses on-site), the site is currently surrounded by the 'CG' zone, and fits the current 'UDO' physical features of the site plan with the following exceptions:

1. Current 'UDO' Landscaping Standards
2. Current "UDO' bicycle parking standards

We have included a site improvement plan if this change in zoning is accepted to bring the site up to these current landscaping and bicycle parking standards. The landscape plan attached includes 35 new trees, 146 new shrubs, and 94 new grasses/perennials. Many of these new plantings will be along 3rd street or visible when driving by on 3rd street to enhance this property with this re-zone.

The desire is that there no waiver or variance needs and wish to stay within the constraints outlined in the Bloomington Unified Ordinance (UDO) with this re-zone request.

528 NORTH WALNUT STREET
812-332-8030

BLOOMINGTON, INDIANA 47404
FAX 812-339-2990

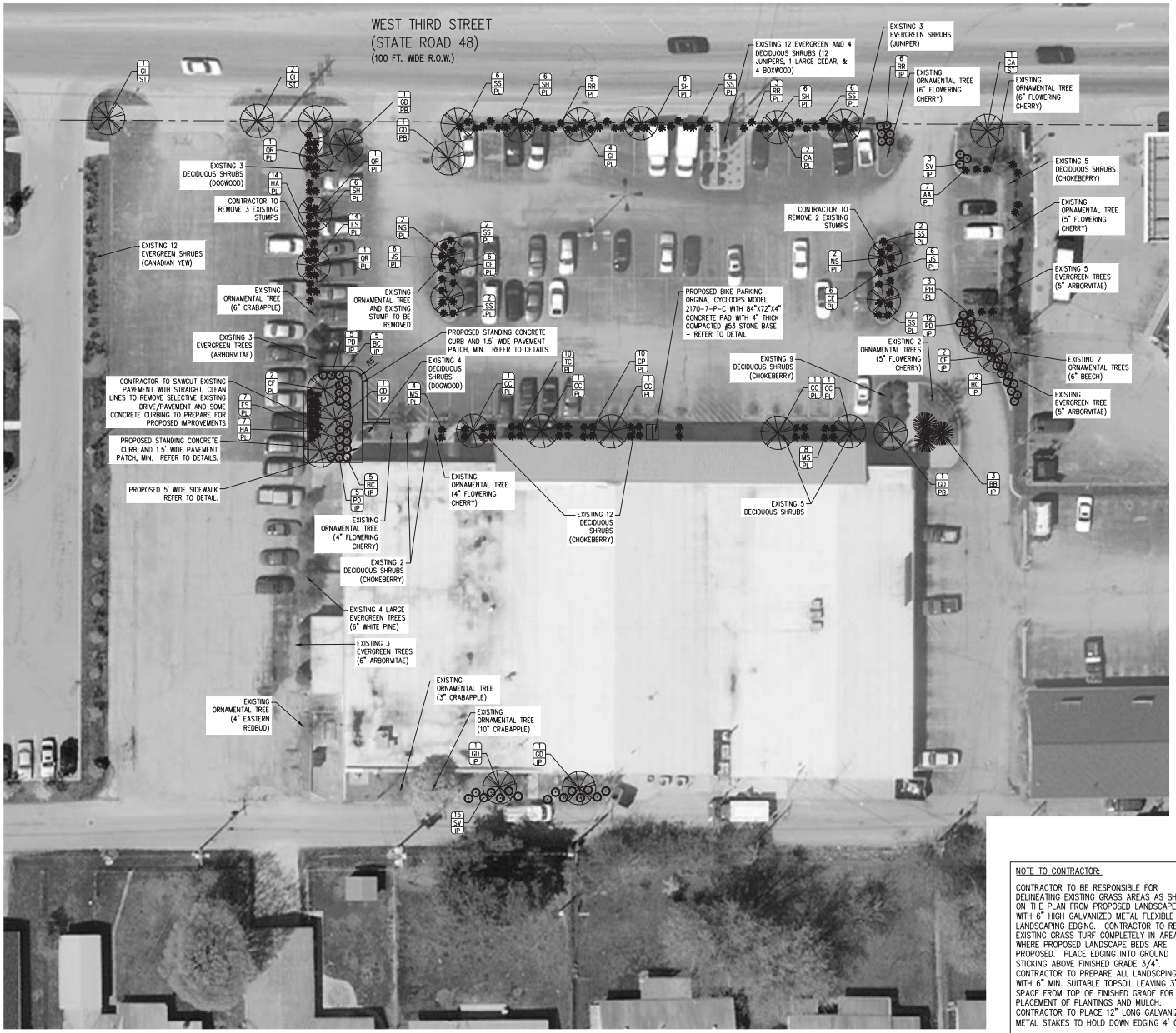
Also, if possible, we'd like to request the Plan Commission waive the need for a 2nd hearing and forward this re-zone to the City Council after the 1st hearing.

Thank you for your consideration in this matter. Please contact us with any additional questions or clarifications regarding this petition.

Sincerely,
Bynum Fanyo & Associates, Inc.

Daniel Butler, PE, Project Engineer

COPY: BFA FILE #401660



PLANT LIST

LEGEND	KEY	BOTANICAL NAME	COMMON NAME	QTY	SIZE & CONDITION
LARGE CANOPY DECIDUOUS TREES					
	NS	ACER RUBRUM	RED SUNSET MAPLE	4	2" CAL., B & B
	QR	QUERCUS RUBRA	RED OAK	3	2" CAL., B & B
	CF	BETULA PLATYPHYLLA	COLUMNAR PINNACLE BIRCH	4	2" CAL., B & B
	GD	CYMNOCLADUS DIOICA	KENTUCKY COFFEE TREE	6	2" CAL., B & B
	G	GINKGO BILOBA	GINKGO	7	2" CAL., B & B
SMALL / MEDIUM DECIDUOUS TREES					
	CC	CORNUS FLORIDA	FLOWERING DOGWOOD	5	2" CAL., B & B
	CA	CERCIS CANADENSIS	EASTERN REDBUD	3	2" CAL., B & B
EVERGREEN TREES					
	BB	PICEA PUNGENS 'BABY BLUE EYES'	DWARF BLUE SPRUCE	3	6' HEIGHT
DECIDUOUS SHRUBS - PARKING LOT PERIMETER					
	CE	PRUNUS PUMILA	SAND CHERRY	12	18" HEIGHT*
	PH	PHILADELPHUS	MOCKORANGE	3	18" HEIGHT*
	MS	MATTEUCCIA STRUTHIOPTERIS	OSTRICH FERN	12	18" HEIGHT*
	SH	SPOROBOLUS HETEROLEPSIS	PRAIRIE DROPSEED	24	18" HEIGHT*
	SS	FESTUCA GLAUCA 'ELIJAH BLUE'	BLUE FESCUE	26	18" HEIGHT*
	AA	ARONIA ARBUTIFOLIA	BLACK CHOKEBERRY	7	18" HEIGHT*
	HA	HYDRANGIA ARBORESCENS	WILD HYDRANGIA	21	18" HEIGHT*
EVERGREEN SHRUBS - PARKING LOT PERIMETER					
	TC	TAXUS CANADENSIS	CANADIAN YEW	10	18" HEIGHT*
	JS	JUNIPER SPECIES	COMMON JUNIPER	12	3 GALLON CONTAINER
	ES	ILEX GLABRA	INKBERRY	21	3 GALLON CONTAINER
	CP	TSUGA CANADENSIS 'PENDULA'	WEEPING HEMLOCK	12	3 GALLON CONTAINER
	RR	RHODODENDRON	RHODODENDRON SPECIES	12	3 GALLON CONTAINER
DECIDUOUS SHRUBS - INTERIOR PLANTINGS					
	SV	SYRINGA VULGARIS	LILAC	18	3 GALLON CONTAINER
	PD	PHLOX DIVARICATA	BLUE PHLOX	22	18" HEIGHT*
	BC	CHASMANTHIUM LATIFOLIUM	INLAND SEA OATS	22	18" HEIGHT*
EVERGREEN SHRUBS - INTERIOR PLANTINGS					
	RR	RHODODENDRON	RHODODENDRON SPECIES	6	3 GALLON CONTAINER

XX PLANT QUANTITY
XX PLANT KEY (TYPE)
XX REQUIREMENT DESIGNATION (AS SEEN BELOW)

PL=PARKING LOT PERIMETER PLANTINGS
IP=INTERIOR PLANTINGS
ST=STREET TREES
PB=PARKING LOT BUMPOUTS

*CONTAINER OR BALL AND BURLAP CONDITION ACCEPTABLE

NOTE: SPECIES SHOWN THAT ARE NOT LISTED IN THE CITY OF BLOOMINGTON ZONING ORDINANCE CHAPTER 20.05 TABLES OF RECOMMENDED PLANT MATERIALS ARE GIVEN BOTANICALLY COMPARABLE DENSITY VALUES.

NOTE TO CONTRACTOR:

CONTRACTOR TO BE RESPONSIBLE FOR DELINEATING EXISTING GRASS AREAS AS SHOWN ON THE PLAN FROM PROPOSED LANDSCAPE BEDS WITH 6" HIGH GALVANIZED METAL FLEXIBLE LANDSCAPING EDGING. CONTRACTOR TO REMOVE EXISTING GRASS TURF COMPLETELY IN AREAS WHERE PROPOSED LANDSCAPE BEDS ARE PROPOSED. PLACE EDGING INTO GROUND STICKING ABOVE FINISHED GRADE 3/4". CONTRACTOR TO PREPARE ALL LANDSCPING BEDS WITH 6" MIN. SUITABLE TOPSOIL LEAVING 3" SPACE FROM TOP OF FINISHED GRADE FOR PLACEMENT OF PLANTINGS AND MULCH. CONTRACTOR TO PLACE 12" LONG GALVANIZED METAL STAKES TO HOLD DOWN EDGING 4' O.C.

CONTRACTOR IS ALSO RESPONSIBLE FOR PLACEMENT OF PLANTINGS, PURCHASING OF PROPOSED PLANTINGS, AND PLACEMENT AND PURCHASING OF PROPOSED MULCH. COLOR OF MULCH PER OWNER.

INDIANA 811 Know what's below. Call before you dig

DIAL '811' BEFORE YOU DIG

PER INDIANA STATE LAW IC8-1-26.
IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

SCALE: 1"=20'

NOTE TO CONTRACTOR

CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS & DEPTHS AND NOTIFY ENGINEER OF ANY INACCURACIES IN LOCATION OR ELEVATION OR ANY CONFLICTS PRIOR TO & AFTER ANY EXCAVATION. NO PAYMENT SHALL BE MADE TO CONTRACTOR FOR UTILITY DESTRUCTION OR UNDERGROUND CHANGES REQUIRED DUE TO CONFLICTING ELEVATIONS.

revisions:

ARCHITECTURE
CIVIL ENGINEERING
PLANNING
BYNUM FANYO & ASSOCIATES, INC.
528 north walnut street
bloomington, indiana
(812) 332-8030
(812) 339-2990 (Fax)

certified by:

PROPOSED
4023 WEST 3RD
RE-ZONE
BLOOMINGTON, INDIANA 47404

title: SITE LANDSCAPE AND IMPROVEMENT PLAN

designed by: DJB
drawn by: DJB
checked by: JSF
sheet no: C101
project no.: 401660

Commercial General (CG) District

20.02.290 Commercial General (CG); District Intent

The CG (Commercial General) District is intended to be used as follows:

- Provide areas within the city where medium scale commercial services can be located without creating detrimental impacts to surrounding uses.
- Promote the development of medium-scaled urban projects with a mix of storefront retail, professional off ce, and/or residential dwelling units creating a synergy between uses where stand-alone uses have traditionally dominated.

Plan Commission/Board of Zoning Appeals Guidance:

- Site plan design should incorporate residential and commercial uses utilizing shared parking in order to ease the transition to residential districts.
- Street cuts should be minimized in order to enhance streetscape and improve access management.
- Encourage proposals that further the Growth Policies Plan goal of sustainable development design featuring conservation of open space, mixed uses, pervious pavement surfaces, and reductions in energy and resource consumption.

20.02.300 Commercial General (CG); Permitted Uses

*** Additional requirements refer to *Chapter 20.05; §SC: Special Conditions Standards.***

- amusements, indoor
- antique sales
- apparel and shoe sales
- art gallery
- artist studio
- arts/crafts/hobby store
- assisted living facility
- auto parts sales
- bank/credit union
- banquet hall
- bar/dance club
- barber/beauty shop
- bed and breakfast
- bicycle sales/repair
- billiard/arcade room
- bookstore
- bowling alley
- brewpub*
- business/professional off ce
- car wash*
- cellular phone/pager services
- coin laundry
- community center
- computer sales
- convenience store (with gas or alternative fuels)*
- convenience store (without gas)
- copy center
- day-care center, adult
- day-care center, child
- drive-through*
- drugstore
- dry-cleaning service
- dwelling, single-family (detached)*
- dwelling, upper f oor units
- equipment/party/event rental (indoor)
- f tness center/gym
- f tness/training studio
- f orist
- furniture store
- garden shop
- gas station*
- gift shop/boutique
- government off ce
- government operations (non-off ce)
- grocery/supermarket
- group care home for developmentally disabled*
- group care home for mentally ill*
- group/residential care home*
- hardware store
- health spa
- home electronics/appliance sales
- jewelry shop
- library
- license branch
- liquor/tobacco sales
- lodge
- medical care clinic, immediate
- medical clinic
- mortuary
- museum
- music/media sales
- musical instrument sales
- nursing/convalescent home
- off ce supply sales
- oil change facility
- park
- parking garage/structure
- pawn shop
- pet grooming
- pet store
- photographic studio
- place of worship
- plant nursery/greenhouse
- police, f re or rescue station
- recreation center
- restaurant
- restaurant, limited service
- retail, low intensity
- rooming house
- school, preschool
- school, primary/secondary
- school, trade or business
- shoe repair
- skating rink
- social service
- sporting goods sales
- tailor/seamstress shop
- tanning salon
- tattoo/piercing parlor
- transportation terminal
- utility substation and transmission facility*
- vehicle accessory installation
- veterinarian clinic
- video rental

20.02.310 Commercial General (CG); Conditional Uses

*** Additional requirements refer to *Chapter 20.05; §CU: Conditional Use Standards.***

- historic adaptive reuse*
- homeless shelter
- rehabilitation clinic